

Readopt with amendment Env-Wq 800, eff. 5-23-07 (doc. ##8887), to read as follows:

CHAPTER Env-Wq 800 SLUDGE MANAGEMENT

Statutory Authority: RSA 485-A:6, X-a

PART Env-Wq 801 PURPOSE AND APPLICABILITY

Env-Wq 801.01 Purpose. The purpose of this chapter is to implement RSA 485-A:4, XVI-b by establishing standards, criteria, and procedures for a permit system to manage the removal, transportation, and disposal of sludge in order to protect human health and the environment, prevent nuisances, and regulate the beneficial use and recycling of sludge that meets the criteria for land application with appropriate performance standards.

Env-Wq 801.02 Applicability.

- (a) These rules shall govern:
 - (1) The processing, storage, and disposal of sludge in bulk;
 - (2) The land application of quality-certified sludge in bulk; and
 - (3) The removal and transportation of sludge derived from human waste that is not class A biosolids.
- (b) Except for the sludge hauling requirements specified in Env-Wq 805, these rules shall not apply to sludge that is disposed as a waste or otherwise used at a solid waste facility permitted by the department pursuant to RSA 149-M.
- (c) Except for the sludge hauling requirements specified in Env-Wq 805, these rules shall not apply to sludge that is disposed in an incinerator permitted to incinerate sludge by the department pursuant to RSA 125-C or RSA 125-I, or both.
- (d) These rules shall not apply to any sludge management activity(ies) incidental to the operation of:
 - (1) A wastewater treatment plant for which a surface water or a groundwater discharge permit has been issued by the department pursuant to RSA 485-A:13; or
 - (2) A water treatment facility granted approval to operate pursuant to RSA 485:8.
- (e) Nothing in these rules shall be construed to modify or lessen the powers conferred upon local authorities by health and land use enabling statutes.
- (f) Nothing in these rules shall be construed to eliminate the need to comply with the federal regulations as specified in 40 CFR part 503.
- (g) Class A biosolids shall be subject to Env-Wq 807 and Env-Wq 810 only.

Env-Wq 801.03 Co-Disposal of Wastes. Hazardous waste as defined in RSA 147-A or solid waste as defined in RSA 149-M, except for wood ash certified for use under Env-Sw 1700 and waste derived products certified for use under Env-Sw 1500, shall not be disposed or processed at a site or facility permitted under these rules.

PART Env-Wq 802 DEFINITIONS

Env-Wq 802.01 “Abutter” means any person who owns property adjacent to, or across a road, railroad, river, or stream from the property on which a sludge management activity will be conducted.

Env-Wq 802.02 “Agronomic rate” means the sludge application rate that is designed to:

- (a) Provide the amount of nitrogen, phosphorus, or other nutrient(s) needed by the crop or vegetation; and
- (b) Minimize the amount of nitrogen and phosphorus that passes below the root zone of the crop or the vegetation to groundwater or moves via run-off to surface water.

Env-Wq 802.03 “Ambient groundwater quality standard” means the maximum concentration level for a regulated contaminant as established in rules adopted pursuant to RSA 485-C:6, currently Env-Or 603.

Env-Wq 802.04 “Applicant” means any person who applies to the department for a permit, waiver, or sludge quality certification.

Env-Wq 802.05 “Beneficial reuse” or “beneficial use” means taking advantage of the nutrient content or soil conditioning properties, or both, of quality-certified sludge, by:

- (a) Supplying agronomic or soil conditioning benefits, such as the nitrogen, phosphorus, micronutrients, or organic matter needs for crops, forested land, or reclamation; and
- (b) Land applying the sludge in accordance with these rules so as to not pose a significant risk to public health or the environment.

Env-Wq 802.06 “Biosolids” means “biosolids” as defined by RSA 485-A:2, XXII, as reprinted in Appendix B.

Env-Wq 802.07 “Class A biosolids” means biosolids that are class A with respect to pathogens under 40 CFR part 503.32(a)(3), and meets one of the vector attraction reduction requirements of 40 CFR part 503.33(b)(1) through (b)(8).

Env-Wq 802.08 “Class B biosolids” means biosolids that are class B with respect to pathogens under 40 CFR part 503.32(b) and meets one of the vector attraction reduction requirements of 40 CFR part 503.33(b)(1) through (b)(11).

Env-Wq 802.09 “Closure” means the procedures used to cease the use of a facility, or a portion thereof, in a manner that will minimize future risks of environmental damage, and includes all required post-closure inspection, monitoring, reporting, and maintenance activities.

Env-Wq 802.10 “Department” means the department of environmental services.

Env-Wq 802.11 “Disposal” means the final discharge, deposit, injection, dumping, mixing, spilling, leaking, incinerating, or placing of sludge into or onto any land such that the sludge or any constituent thereof could enter the environment, be emitted into the air or be discharged into any surface water or groundwater. Disposal includes land application.

Env-Wq 802.12 “Facility” means a location or system for storing sludge for longer than 8 months or for the processing, treatment, or disposal of sludge, other than land application. Facilities include, but are not limited to, lagoons, sludge treatment facilities, sludge monofills, sludge transfer stations, and locations where sludge is treated or mixed with other sludge or other material for shipment off site.

Env-Wq 802.13 “Generator” means the person who holds title to the water or wastewater treatment plant that produced the sludge, or to the facility where sludge is mixed or treated to produce another material derived from sludge.

Env-Wq 802.14 “Governing body” means the board of selectmen in a town, the board of aldermen or council in a city or town with a town council, or when used to refer to unincorporated towns or unorganized places, or both, the county commissioners.

Env-Wq 802.15 “Hauler” means any person engaged in the removal or transportation of sludge.

Env-Wq 802.16 “In bulk” means distributed in a container that holds greater than 100 pounds.

Env-Wq 802.17 “Industrial wastewater” means wastewater generated from a commercial or industrial process.

Env-Wq 802.18 “Lagoon” means a pit or excavation designed or intended to receive sludge or that actually contains sludge.

Env-Wq 802.19 “Land application” means the placement of quality-certified sludge on the ground surface for beneficial use, whether or not the material is incorporated or injected into the soil.

Env-Wq 802.20 “Locally-accessible place” means a location to which the public has access in the town or city where the sludge management activity is proposed. The term includes town or city halls, schools, selectmen’s offices, and public libraries.

Env-Wq 802.21 “Management” or “manage” means supervising, controlling, or undertaking any activity(ies) regulated under Env-Wq 800, including transporting, land applying, stockpiling, treating, disposing, or processing.

Env-Wq 802.22 “Operator” means the person responsible for the sludge management activity(ies) at a site, facility, or wastewater treatment plant.

Env-Wq 802.23 “Owner” means the person who holds title to the land on which sludge is managed or is proposed to be managed.

Env-Wq 802.24 “Permit” means the written document issued by the department that authorizes the holder to manage the site or facility identified in the document or to use the vehicle identified in the document to remove and transport sludge according to the terms of the document.

Env-Wq 802.25 “Permit holder” means the person to whom a permit has been issued by the department.

Env-Wq 802.26 “Person” means “person” as defined by RSA 485-A:2, IX, as reprinted in Appendix B.

Env-Wq 802.27 “Poorly drained soil” means a type of soil where water is removed so slowly that the soil is wet at shallow depths periodically during the growing season or remains wet for long periods. The occurrence of internal free water is shallow or very shallow and common or persistent. Free water is commonly at or near the surface long enough during the growing season so that most mesophytic crops cannot be grown, unless the soil is artificially drained. The soil is not continuously wet directly below plow depth. Free water at shallow depth is usually present.

Env-Wq 802.28 “Processing” means any activity to reduce the quantity of sludge or alter its chemical, biological, or physical state. Processing does not include the alteration of sludge’s chemical, biological, or physical state solely for the purpose of odor control.

Env-Wq 802.29 “Publicly owned treatment works (POTW)” means a wastewater treatment plant that is owned by a municipality or other governmental agency or subdivision.

Env-Wq 802.30 “Quality-certified sludge (QC sludge)” means sludge or a mixture of sludge that:

- (a) Has received sludge quality certification pursuant to Env-Wq 807; and
- (b) Contains nutrients or organic material, or both, that can be used:
 - (1) To improve crop land or forested land; or

(2) For reclamation.

Env-Wq 802.31 “Reclamation” means the addition of organic matter and nutrients to facilitate the establishment of vegetation on soils that have been severely disturbed or that otherwise do not support vegetation sufficient to prevent erosion. The term does not include the land application of sludge or mixtures of sludge at a rate of less than 1,500 pounds of nitrogen per acre and having a carbon-to-nitrogen ratio of between 30:1 and 40:1.

Env-Wq 802.32 “Short paper fiber” means “short paper fiber” as defined by RSA 485-A:2, XXIII, as reprinted in Appendix B.

Env-Wq 802.33 “Site” means contiguous land areas owned by the same person(s), on which quality-certified sludge is stockpiled for 8 months or less or land applied, even if the land area is divided by a highway, railroad bed, water body, or boundary of a political subdivision.

Env-Wq 802.34 “Sludge” means “sludge” as defined by RSA 485-A:2, XI-a, as reprinted in Appendix B. The term includes industrial sludge and sludge mixed with another sludge or another material.

Env-Wq 802.35 “Sludge derived from human waste” means sludge produced by the treatment of wastewater that contains human fecal material. Sludge is considered to be derived from human waste if any portion of the influent wastewater contains human fecal material.

Env-Wq 802.36 “Stockpiling” means the storage of sludge.

Env-Wq 802.37 “Surface water” means “surface waters of the state” as defined by RSA 485-A:2, XIV, as reprinted in Appendix B. The term includes wetlands, but does not include non-tidal drainage ditches that were designed, built, and used to convey wastewater or stormwater and does not include constructed wetlands, lagoons, and other treatment systems designed and built solely as wastewater or stormwater treatment systems provided such facilities were not initially constructed in waters of the state or were not constructed to serve other mitigation purposes.

Env-Wq 802.38 “Transfer” means, as applicable:

- (a) The conveyance of a fee simple interest in real estate; or
- (b) A change in the ownership or operational control of a person holding a permit, or a change in an individual holding a permit as follows:
 - (1) For a partnership, a change in the majority of general partners;
 - (2) For a corporation, the conveyance of all corporate assets or of a majority of voting shares to a new person;
 - (3) For other organizations, a transfer of the control of the organization to a new person; and
 - (4) For an individual, transfer of control to another person.

Env-Wq 802.39 “Vector” means a carrier that is capable of transmitting a pathogen from one organism to another, including but not limited to flies and other insects, rodents, birds, and other vermin.

Env-Wq 802.40 “Very poorly drained soil” means a type of soil where water is removed from the soil so slowly that free water remains at or very near the ground surface during much of the growing season. The occurrence of internal free water is very shallow and persistent or permanent. Unless the soil is artificially drained, most mesophytic crops cannot be grown. The soils are commonly level or depressed and frequently ponded, but if rainfall is high or nearly continuous, slope gradients can be greater.

Env-Wq 802.41 “Wastewater treatment plant” means “wastewater treatment plant” as defined in RSA 485-A:2, XVI-a, as reprinted in Appendix B.

PART Env-Wq 803 REQUIREMENTS FOR NOTIFICATION

Env-Wq 803.01 Notification Requirements for Site and Facility Permits.

- (a) The applicant shall provide notice in accordance with this section upon filing an application with the department for a site or facility permit.
- (b) The notice shall be provided to:
- (1) The governing body of the municipality in which the proposed site or facility is located and the governing body of any adjacent municipality in which an abutter is located;
 - (2) All abutters to the proposed site or facility as such abutters and their respective legal mailing addresses are identified in the municipal tax records as of the close of business on the day before the date on which notice is provided pursuant to this section;
 - (3) All other persons who own property that is located within 500 feet of the area on which the activity will occur as such landowners and their respective mailing addresses are identified in the municipal tax records as of the close of business on the day before the date on which notice is provided pursuant to this section; and
 - (4) The department.
- (c) The notice shall be:
- (1) In writing; and
 - (2) Delivered by one of the following methods:
 - a. Sent by certified mail, return receipt requested;
 - b. Delivered by hand, in which case the applicant shall obtain a signed acknowledgment from the recipient that the notice was received; or
 - c. Sent by first class mail, in which case the applicant shall obtain a certificate of mailing from the United States post office at which the notices were mailed.
- (d) The notice shall contain the following information:
- (1) A statement that an application for a site or facility permit, as applicable, has been filed and the type of sludge management activity regulated by Env-Wq 800 that is proposed;
 - (2) Identification of the proposed site or facility, as applicable, including street address and municipality;
 - (3) The names, addresses, and telephone numbers of:
 - a. The applicant;
 - b. Each generator of sludge that will be managed at the site or facility;
 - c. The operator at the site or facility; and
 - d. The owner, and the lessee if the land is leased;
 - (4) The estimated annual quantity of sludge, in wet tons, to be received at the site or facility;
 - (5) The proposed dates of commencement and cessation of the activity;

(6) The identification of the locally accessible place where the application and all supporting information, as required by Env-Wq 806.01 for a site permit or by Env-Wq 808.01 for a facility permit, are available for review;

(7) A statement that a 30-day public comment period will be advertised by the department in a newspaper of local circulation after the application is determined to be complete; and

(8) A statement that a local public hearing will be advertised and held by the department if requested within the 30-day public comment period by petition of 10 residents or by an official of the municipality in which the site or facility is proposed to be located.

(e) If a person to whom notice is required to be given cannot be located, or fails or refuses to sign for the certified mail, or refuses to sign an acknowledgment when the notice is delivered in hand, the person giving the notice shall provide proof to the department that an attempt to deliver the notice was made, which proof shall be in the form of an affidavit that describes the efforts made to deliver the notice.

Env-Wq 803.02 Notification Requirements for Land Application.

(a) A person who will be land applying QC sludge pursuant to a permit issued under Env-Wq 806 shall provide notice in accordance with this section.

(b) The notice shall be sent to the department and published in a newspaper of general circulation in the municipality where the land application of QC sludge will occur at least 14 days before the intended date of the first annual land application.

(c) The notice shall include the following information:

(1) A statement that the person intends to land apply QC sludge and the permit number and date of the permit that authorizes the activity;

(2) Identification of the site on which the activity will occur, including street address and municipality;

(3) The name(s), address(es), and telephone number(s) of:

a. The permit holder;

b. Each generator of the QC sludge that will be land applied at the site or facility;

c. The operator at the site, if other than the permit holder; and

d. The owner, and the lessee if the land is leased, if other than the permit holder; and

(4) The proposed dates of commencement and cessation of the activity.

(d) The permit holder shall post a copy of the notice at each vehicular and commonly-used entrance to the site beginning no later than 3 days prior to application and continuing through at least 3 days after application.

PART Env-Wq 804 PERMIT REQUIREMENTS

Env-Wq 804.01 Sludge Hauler Permit Required.

(a) Except as provided in (b), below, no person shall transport sludge derived from human waste on public roads without first obtaining a sludge hauler permit from the department.

(b) A sludge hauler permit shall not be required for:

- (1) The interstate transportation of sludge that is not generated, processed, transferred, stored, used, or disposed of in New Hampshire;
- (2) Transporting QC sludge from a stockpile location at a permitted site to fields at the same site where the QC sludge will be land applied; or
- (3) Class A biosolids.

Env-Wq 804.02 Site and Facility Permits Required.

(a) Except as provided in (e), below, no person shall manage sludge at any place which does not have:

- (1) A site or facility permit issued in accordance with Env-Wq 800;
- (2) A wastewater treatment plant permit issued under RSA 485-A:13; or
- (3) A solid waste facility permit issued under RSA 149-M.

(b) Except as provided in (e), below, a site permit shall be required for:

- (1) Each QC sludge land application site;
- (2) Each QC sludge mixing site where the resultant mixture is to be used on-site; and
- (3) Each QC sludge stockpile site where QC sludge will be stockpiled for 8 months or less and where the stockpile location is not on a site permitted pursuant to (1) or (2), above.

(c) Except as provided in (d), below, a facility permit shall be required for:

- (1) The processing, treatment, or disposal, other than land application, of sludge;
- (2) Each QC sludge mixing site where the resultant mixture is to be used off-site;
- (3) Each QC sludge stockpile site where any material will be stockpiled for greater than 8 months in any 12-month period;
- (4) The construction, operation, and closure of any sludge lagoon or monofill; and
- (5) The construction, operation, and closure of any sludge transfer station.

(d) A facility permit shall not be required for the processing of QC sludge for the sole purpose of odor control at a site permitted for land application.

(e) A person who land applies class A biosolids covered by a valid sludge quality certification under Env-Wq 807 shall be exempt from the requirement to obtain a site permit, but shall comply with Env-Wq 807.07 and Env-Wq 810.

Env-Wq 804.03 Sludge Quality Certification Required.

(a) Except as provided in (b) and (c), below, no person shall land apply, distribute for land application, sell, or give away any sludge or sludge mixture, in bulk, that is not covered by a valid sludge quality certification pursuant to Env-Wq 807.

(b) A sludge quality certification shall not be required for sludge mixtures produced at a facility where each constituent sludge has a sludge quality certification.

- (c) A sludge quality certification shall not be required for sludge that is not used for land application.

Env-Wq 804.04 Notice of Permit and Sludge Quality Certification Application Review.

(a) Within 30 days of receipt of an application with the appropriate fee for a site permit, a facility permit, a sludge quality certification, or a permit modification pursuant to Env-Wq 804.10(c), the department shall determine if the application is complete.

(b) Upon determination by the department that an application for a site or facility permit, sludge quality certification, or permit modification is not complete, the department shall notify the applicant in writing, identifying the deficiencies causing the application to be deemed incomplete and informing the applicant that if a response is not received within 60 days of the date of the letter, the department will deny the application.

(c) If the applicant does not respond within 60 days of the date of the notice sent pursuant to (b), above, the department shall deny the permit.

(d) Upon determining that an application for a site or facility permit or permit modification is complete, the department shall:

(1) Provide written notice of completeness to the applicant and the governing body of each municipality that received notice pursuant to Env-Wq 803.01(b)(1);

(2) For proposed sites or facilities within one-quarter mile of the normal high-water mark of rivers designated pursuant to RSA 483:15, provide written notice of completeness to:

- a. The department's rivers coordinator established pursuant to RSA 483:3: and
- b. The chairman of the applicable local river management advisory committee established pursuant to RSA 483:8-a; and

(3) Publish notice of a 30-day public comment period that contains the information specified in (e), below, in a newspaper of local circulation.

(e) The newspaper notice shall contain the following information:

(1) The name and mailing address of the applicant;

(2) A statement that a complete application has been received and the department has opened a public comment period;

(3) The deadline for submission of written comments, which shall be no sooner than 30 days from the date the notice is published;

(4) The locally-accessible place where the application can be reviewed;

(5) The name, address, and telephone number of the person in the department receiving comments and petitions;

(6) The type of activity to be conducted;

(7) The proposed location of the site or facility;

(8) The name of the property owner; and

(9) A statement that the department will conduct a local public hearing if so requested by a signed petition of 10 residents or a local government official in the municipality in which the activity is proposed.

Env-Wq 804.05 Public Hearings.

(a) If a public hearing is requested by a signed petition of 10 residents or by a local government official in the municipality in which the activity is proposed, the department shall schedule a public hearing for the pending application to be held in the municipality in which the activity is proposed to occur.

(b) At least 15 days prior to the hearing, the department shall publish a notice in a newspaper of local circulation containing the following information;

- (1) The name and address of the applicant;
- (2) The location, date, and time of the public hearing;
- (3) The locally-accessible place where the application can be reviewed
- (4) The name, e-mail, and telephone number of the person in the department receiving comments;
- (5) The type of activity to be conducted;
- (6) The proposed location of the site or facility;
- (7) The name of the property owner; and
- (8) The deadline for submission of written comments.

(c) At the hearing:

- (1) The applicant shall:
 - a. Make available 3 copies of the application, the site plan, the management plan, and if applicable, the facility plan, the groundwater monitoring plan, and the closure plan for the public to review;
 - b. Make a presentation to the public summarizing all the information required in the application, the site plan, the management plan, and if applicable, the facility plan, the groundwater monitoring plan, and the closure plan; and
 - c. Respond to all questions concerning the proposed sludge management activity; and
- (2) After the applicant has responded to all questions concerning the proposed activity, the department shall:
 - a. Receive public comments on the application and supporting information as to its accuracy; and
 - b. Receive all other public comments.

(d) The department shall accept written comments on the application for not less than 7 days after the date of the hearing or until the deadline for written comments specified in the notice issued pursuant to Env-Wq 804.04(d)(3), whichever is later.

Env-Wq 804.06 Decision on Application.

(a) If the information submitted with any complete application is insufficient for the department to make a determination that the proposed activity will comply with the applicable requirements of RSA 485-A and these rules, the person proposing to undertake the activity shall provide such additional information as the department determines is necessary to make the determination. If the additional information is not submitted

within 60 days of the department's request or by the deadline otherwise agreed to by the applicant and the department, the department shall deny the application.

(b) Subject to (c), below, within 60 days of receipt of a complete application the department shall:

(1) Issue or deny the site or facility permit, sludge quality certification, or permit modification based on the criteria specified in Env-Wq 806.05, Env-Wq 808.05, Env-Wq 807.03, or Env-Wq 804.10, as applicable; and

(2) Send written notice of its decision to the applicant and, in the case of a permit modification or issuance of a site or facility permit, to the governing body of each municipality to which notice was sent pursuant to Env-Wq 803.01(b)(1).

(c) The time spent waiting for the applicant to provide any information requested pursuant to (a), above, shall not be included when calculating the 60 days in (b), above.

(d) If site-specific conditions or limitations are necessary to protect public health or safety or the environment, the department shall include such conditions or limitations in the site or facility permit or sludge quality certification that is issued.

(e) If a permit modification pursuant to Env-Wq 804.10(c), a site or facility permit, or sludge quality certification is denied, the written notification provided pursuant to (b)(2), above, shall specify the reason(s) for the denial and inform the applicant that the decision may be appealed to the water council as a permitting decision in accordance with RSA 21-O:14.

Env-Wq 804.07 Suspension, Revocation, or Refusal to Renew.

(a) In this section, "approval" means a site or facility permit, sludge quality certification, or waiver, as applicable.

(b) If after issuing an approval the department receives information indicating that good cause, as set forth in (g), below, exists to suspend or revoke the approval, the department shall proceed in accordance with RSA 541-A:30, II and the provisions of Env-C 200 applicable to adjudicative proceedings.

(c) After proceeding as specified in (b), above, the department shall revoke the approval if the department determines that the circumstances cannot be corrected to conform to applicable requirements.

(d) After proceeding as specified in (b), above, the department shall suspend the approval, subject to (e), below, if the department determines that, while good cause exists, the circumstances can be corrected to conform to applicable requirements.

(e) If an approval is suspended pursuant to (d), above, the department shall not reinstate the approval until:

(1) The circumstances have been corrected to conform with applicable requirements; and

(2) The permit holder submits a written request to the department requesting that the approval be reinstated.

(f) If after receiving a request for renewal of an approval the department receives information which indicates that good cause, as set forth in (g), below, exists to refuse to renew the approval, the department shall proceed in accordance with RSA 541-A:30, II and the provisions of Env-C 200 applicable to adjudicative proceedings and refuse to renew the approval until the circumstances have been corrected to conform with applicable requirements.

(g) Good cause to suspend, revoke, or refuse to renew an approval shall include the following:

- (1) The person to whom the approval was issued has not complied with the conditions of the approval or these rules;
- (2) The plans submitted with the application on which the approval was based do not accurately portray the actual site, facility, or management activities and the approval would not have been issued if accurate plans had been submitted;
- (3) Any other information submitted in support of the application is not true and complete or is misleading and the approval would not have been issued if the information submitted had been true, complete, and not misleading;
- (4) The person to whom the approval was issued has failed to comply with an order of the department relative to sludge management, including an order to undertake corrective measures;
- (5) The person to whom the approval was issued has failed to comply with an order of the department relative to a violation of any other statute administered by the department;
- (6) The person to whom the approval was issued has failed to pay any administrative, civil, or criminal penalties owed to the department; or
- (7) The person to whom the approval was issued has been convicted of a misdemeanor under any statute administered by the department, or of a felony in a state or federal court.

Env-Wq 804.08 Permit Transfer.

- (a) The department shall issue a sludge hauler permit to the applicant for the vehicle(s) identified in the application. The permit holder shall not transfer the permit to any other person without first obtaining approval from the department in accordance with (c) through (e), below.
- (b) The department shall issue a site or facility permit to the applicant. The permit holder shall not transfer the permit to any other person without first obtaining approval from the department in accordance with (c) through (e) below.
- (c) The person wishing to transfer a permit shall submit to the department:
 - (1) The name, address, and daytime telephone number of the current permit holder;
 - (2) The name, address, and associated permit number of the site or facility;
 - (3) The name, mailing address, and daytime telephone number of the person(s) to whom the permit will be transferred; and
 - (4) An application for a permit modification pursuant to Env-Wq 804.10(c) for any changes that are proposed to the permit, the site plan, the facility plan, the closure plan, or the management plan, as applicable.
- (d) The person to whom the permit is proposed to be transferred shall submit a statement declaring whether the person has been convicted of a misdemeanor under any statute administered by the department within the 5 years prior to the date of application or of a felony in any state or federal court within the 10 years prior to the date of application.
- (e) The department shall approve the requested transfer if:
 - (1) The permit holder is in compliance with these rules and the permit;
 - (2) Any proposed changes are in accordance with Env-Wq 804.10;

(3) Good cause as specified in Env-Wq 804.07(g) to suspend, revoke, or refuse to renew the permit does not exist, unless the reason that good cause exists can be corrected prior to or as a result of the permit transfer; and

(4) The person to whom the permit is proposed to be transferred has not been convicted of a misdemeanor under any statute administered by the department within the 5 years prior to the date of application, or of a felony in any state or federal court within the 10 years prior to the date of application.

Env-Wq 804.09 Transfer of Land Ownership.

(a) If land that has a facility or site permit associated with it is transferred to a new owner, then the permit holder shall notify the department within 10 days after the transfer and shall suspend all activities covered by the permit until the statement described in (c), below, is signed by the new property owner and is received by the department.

(b) If a signed statement as described in (c), below, does not accompany the notice of land transfer, then upon receipt of the notice the department shall commence a proceeding under RSA 541-A:30, II and the provisions of Env-C 200 applicable to adjudicative proceedings to revoke the permit. If the permit holder obtains and submits the signed statement the proceeding shall be terminated.

(c) The statement from the new owner shall state that:

(1) The new owner is aware that the site or facility exists on the land;

(2) The new owner agrees to the continued operation of the site or facility; and

(3) The new owner has given permission to the permit holder to enter upon the land for purposes of investigation and operation, including the implementation of remedial measures if ordered by the department.

(d) If the new owner chooses to discontinue the activities covered by the site or facility permit, the permit holder shall:

(1) Submit a written statement to the department indicating that the activities have been discontinued;

(2) Remove any infrastructure specific to the activities that were subject to the permit; and

(3) If a facility, close the facility in accordance with the approved closure plan.

Env-Wq 804.10 Modification of a Site or Facility Permit.

(a) The department shall modify the conditions of a permit without request by the permit holder in order to achieve compliance with these rules.

(b) In the event of any such modification the department shall:

(1) Provide written notice to the permit holder stating the proposed modifications and the reason(s) for the modification(s);

(2) Provide the permit holder 30 days from the date of the written notice to comment in writing on the proposed permit modification(s);

(3) After considering the permit holder's written comments, if any, issue a revised permit with a timetable for bringing the permit holder's activities into compliance with the revised conditions of the permit; and

- (4) Notify the permit holder that the permit holder may request an adjudicative hearing in accordance with Env-C 200 if aggrieved by the department's decision.
- (c) The permit holder shall apply to the department as specified in (d), below, to renew a site or facility permit, to modify a site or facility permit, or to modify any permitted management activity prior to implementing any changes.
- (d) The permit holder shall provide the following information to the department:
- (1) The site or facility permit number;
 - (2) The name, address, and telephone number of the permit holder, property owner, and generator;
 - (3) A detailed description of all proposed modifications;
 - (4) A revised site, facility, management, or closure plan highlighting the proposed changes;
 - (5) If applicable, revised facility plans and specifications for construction and closure stamped by a New Hampshire registered professional engineer;
 - (6) An explanation of why the proposed change(s) is being requested;
 - (7) The effect of the modification on the original and/or current site or facility design capacity as established by Env-Wq 806.07(e) and Env-Wq 808.07(d);
 - (8) Identification and status of all other federal or state permits or approvals necessary to effect the proposed modification(s);
 - (9) The permit holder's proposed schedule for implementing such changes;
 - (10) A list and status of any outstanding violations, accompanied by a statement from the permit holder indicating how full compliance shall be attained prior to approval of the modification;
 - (11) A list of any current abutters to whom the notice was not provided at the time of the original application; and
 - (12) If the permit holder is not the property owner, a written statement signed by the property owner giving permission for the modification.
- (e) Subject to (g), below, the department shall approve the modification if it determines that:
- (1) All applicable requirements of these rules have been met;
 - (2) If the applicant is other than the owner, the owner has given permission to the applicant for the modification;
 - (3) The applicant has applied for all other state permits that are necessary for the proposed modification;
 - (4) Management of the sludge at the site or facility in accordance with the proposed modification will not violate any statutes or rules administered by the department; and
 - (5) The permit holder has paid all fees and administrative, civil, or criminal penalties owed to the department.

(f) Subject to (g), below, the department shall approve or deny an application to modify a permit within 30 days of receipt of the information required in (d), above.

(g) If the proposed permit modification increases the total quantity of sludge being managed at the site or facility by more than 20% from the quantity specified in the current permit, the modification shall be processed in accordance with Env-Wq 803 and Env-Wq 804.04 through Env-Wq 804.06.

PART Env-Wq 805 SLUDGE HAULER PERMIT REQUIREMENTS

Env-Wq 805.01 Sludge Hauler Permit Applications.

(a) Any applicant for a permit to remove or transport sludge derived from human waste that is not class A biosolids on public roads shall provide the following information on a form obtained from the department:

- (1) The name, mailing address, and daytime telephone number of the applicant, if an individual;
- (2) The name, mailing address, and daytime telephone numbers of the applicant's business and contact person;
- (3) Any telephone numbers to be used in case of emergency;
- (4) The vehicle identification number and license plate number for each vehicle that will be used to transport containers of sludge;
- (5) Except as provided by Env-Wq 805.06(d), the name, principal place of business, and telephone number of the transporting company that will appear on both sides of the vehicle that will be used to transport the container(s) carrying the sludge; and
- (6) Whether the applicant or owner has been convicted of a misdemeanor under any statute administered by the department within the 5 years prior to the date of application, or of a felony in any state or federal court during the 10 years prior to the date of application.

(b) Each application shall be accompanied by the fee specified in Env-Wq 805.04.

(c) Each application shall be accompanied by a certification that upon issuance of the permit, the applicant shall assume complete responsibility for ensuring that each person who transports sludge using the applicant's vehicle(s) is familiar with the requirements of these rules.

(d) Each application shall be accompanied by a statement signed by the applicant stating that each vehicle and container proposed to be used to transport sludge meets, and will be maintained so as to continue to meet, all federal and state requirements applicable to transportation of sludge.

Env-Wq 805.02 Expiration of Sludge Hauler Permits. Any sludge hauler permit issued pursuant to this part shall expire on January 31 of the odd-numbered year following the date of issuance.

Env-Wq 805.03 Application to Renew a Sludge Hauler Permit.

(a) Any person to whom a sludge hauler permit has been issued who wishes to renew the permit shall submit the information required in Env-Wq 805.01 and the permit fee specified in Env-Wq 805.04 to the department prior to the expiration of the permit.

(b) If the renewal application is submitted prior to the expiration of the permit, the permit holder may continue to operate under the terms of the permit as provided in RSA 541-A:30, I, even if a decision on the renewal application has not been made prior to the expiration date.

(c) If the renewal application is not submitted prior to the expiration of the permit, the permit holder shall discontinue operating under the terms of the permit and apply for a new permit.

Env-Wq 805.04 Sludge Hauler Permit Fees.

(a) The applicant for issuance or renewal of a sludge hauler permit shall submit a fee in the amount of \$100 for each vehicle used to carry sludge with the application.

(b) The fee, if paid by check or money order, shall be made payable to "Treasurer-State of NH."

(c) The fee shall not be prorated or refunded if the permit term established pursuant to Env-Wq 805.02 is less than 2 full years.

(d) Any New Hampshire political subdivision that transports its own sludge shall be exempt from the fee specified above.

Env-Wq 805.05 Criteria for Review.

(a) Within 30 days of receipt of the information required in Env-Wq 805.01, the department shall issue a written decision on the application to the applicant.

(b) The department shall issue an initial sludge hauler permit or renew an existing sludge hauler permit for the vehicle(s) specified in the application if it determines that the following criteria have been met:

(1) All applicable requirements of Env-Wq 800 have been met;

(2) The applicant submits a signed statement stating that all vehicles and containers proposed to transport sludge comply with all federal and state requirements applicable to sludge transportation and will be maintained so as to continue to comply with such requirements;

(3) The applicant has not been convicted of a misdemeanor under any statute administered by the department within the 5 years prior to the date of application, or of a felony in any state or federal court during the 10 years prior to the date of application; and

(4) The applicant has paid all fees and administrative, civil, or criminal penalties owed to the department.

(c) If the department denies the application, the decision issued pursuant to (a), above, shall specify the reason(s) for the denial.

Env-Wq 805.06 Identification of Vehicle(s).

(a) The permit holder shall ensure that a copy of the sludge hauler permit is in the vehicle at all times.

(b) Each sludge hauler shall display the name, business address, and telephone number of the hauler or transporting company on both sides of the vehicles used to transport sludge, unless exempt pursuant to (d), below.

(c) The information required by (b), above, shall be in permanent and legible lettering at least 3 inches high.

(d) Vehicles that are owned and operated by New Hampshire political subdivisions and that bear the political subdivision's official seal on each side of the vehicle shall not need further identification.

(e) The sludge hauler shall label each container when transporting sludge with the word "sludge" on the curbside of the container in lettering that is legible, visible, and at least 3 inches tall.

Env-Wq 805.07 Maintenance of Containers and Vehicles. A hauler who has been issued a permit pursuant to Env-Wq 805 shall maintain each container and vehicle used to transport sludge as follows:

- (a) Each container and vehicle shall be maintained:
 - (1) So as not to create unreasonable malodors or public health hazards; and
 - (2) In compliance with all federal and state requirements applicable to sludge transportation;
- (b) Each container transporting sludge from which liquid might be released during transport shall be watertight; and
- (c) For containers transporting liquid sludge:
 - (1) All piping, valves, and rigid or flexible connections shall be accessible and capable of being cleaned;
 - (2) All inlet and outlet connections shall be constructed and maintained such that no material will leak, spill, or run out of the container during transfer or transportation; and
 - (3) All discharge outlets shall be designed to control the flow of discharge without spraying or flooding the receiving area.

Env-Wq 805.08 Transportation of Sludge.

- (a) Sludge derived from human waste which is not class A that is being transported to a land application or stockpile site shall meet class B requirements at a minimum prior to arriving at a site.
- (b) No person shall transport sludge that is not QC sludge to a site permitted under Env-Wq 806.
- (c) All containers used for transporting sludge shall be covered during transport to minimize odors.
- (d) Containers transporting sludge shall not be placed for longer than 24 hours at a place that does not have a site or facility permit.
- (e) All containers shall be inspected by the driver prior to transport on public roads to ensure that the contents will not leak, spill, or run out of the container during transfer or transportation.
- (f) All vehicles and containers used to transport sludge shall conform to all applicable federal and state requirements for sludge transportation.

Env-Wq 805.09 Change of Vehicle. Whenever a permit holder obtains an additional vehicle or replaces a vehicle used for transporting containers of sludge, the permit holder shall:

- (a) Notify the department in writing prior to placing the vehicle in service to transport sludge;
- (b) Supply the identification number and license plate number for the vehicle(s); and
- (c) Pay the fee, if any, required under Env-Wq 805.04.

Env-Wq 805.10 Recordkeeping.

- (a) Each sludge hauler permit holder shall record the following information for each load of sludge:
 - (1) The date the sludge is transported from the generator's site or facility;
 - (2) The generator's name, address, and daytime telephone number;

- (3) The quantity of sludge, in wet tons;
 - (4) The type of sludge, such as class B biosolids or sludge that has not received sludge quality certification;
 - (5) The name, address, and telephone number of the hauler permit holder and of the driver of the motorized vehicle if other than the permit holder;
 - (6) The name, address, and telephone number of each site, facility, solid waste facility, or wastewater treatment plant to which the sludge or class B biosolids is delivered; and
 - (7) The date the sludge was delivered to the site or facility.
- (b) The information required by (a), above, shall be maintained in the vehicle used to transport the sludge while the material is being transported.
- (c) The hauler shall:
- (1) Retain the records for a minimum of 5 years after expiration of the hauler permit to which the records relate; and
 - (2) Make the records available for review by the department during normal business hours.

Env-Wq 805.11 Reporting. Each hauler shall provide the information required by Env-Wq 805.10(a) monthly to the operator of the site, facility, solid waste facility, or wastewater treatment plant to which the sludge is delivered by no later than the 15th of the month following the month of the delivery.

Env-Wq 805.12 Accidental Release.

- (a) In the event of an accidental release of sludge, the permit holder shall:
- (1) Immediately take action to contain the spill, minimize the environmental impact, and begin clean up procedures;
 - (2) Subject to (c), below, notify the department within 24 hours of the release as specified in (b), below.
- (b) The permit holder shall provide the following information to the department:
- (1) The date, time, and location of the spill;
 - (2) The quantity of sludge spilled and the quantity of sludge recovered, in wet tons, and the final disposition of the recovered sludge;
 - (3) The quantity, in wet tons, and final disposition of any sludge that was not recovered;
 - (4) The hauler's permit number and the name and daytime telephone number of the driver involved in the incident;
 - (5) The name and daytime telephone number of the generator;
 - (6) The approximate distance to any surface waters and storm drains within 100 feet of the spill;
 - (7) The actions taken to control the extent of the spill and minimize the environmental impact; and
 - (8) Future actions necessary to clean up the spill, if applicable.
- (c) Notification to the department shall not be required if all of the following conditions are met:

- (1) For sludge that contains greater than 10 percent solids, the discharge is less than 25 gallons or 5 cubic feet;
- (2) The discharge is immediately and completely contained;
- (3) The discharge is completely removed within 24 hours; and
- (4) There is no impact to groundwater or surface water.

PART Env-Wq 806 SITE PERMIT REQUIREMENTS

Env-Wq 806.01 Site Permit Applications.

- (a) Any person proposing to undertake QC sludge management activities at a site shall apply for a site permit.
- (b) The applicant shall provide the following information on a form obtained from the department:
 - (1) The name, mailing address, and daytime telephone number of the applicant, if an individual;
 - (2) The name, mailing address, and daytime telephone number of the applicant's business;
 - (3) The location of the proposed site, including street address, tax map and lot number, and current deed reference;
 - (4) The site owner's name, mailing address, and daytime telephone number;
 - (5) Identification of each type of land application activity being proposed for the site, including but not limited to agricultural land application, forest application, reclamation, or stockpiling;
 - (6) A description of the use of the site, including types and amounts of fertilizers or soil amendments used on each field, if applicable, covering 5 years immediately prior to submission of the application; and
 - (7) Whether the applicant has been convicted of a misdemeanor under any statute administered by the department within the 5 years prior to the date of application or of a felony in any state or federal court during the 10 years prior to the date of application.
- (c) The applicant shall submit the following with the application:
 - (1) A site plan prepared in accordance with Env-Wq 806.06, and a copy of the plan that has been reduced to a size of 8-1/2 inches by 11 inches or 11 inches by 17 inches;
 - (2) A management plan prepared in accordance with Env-Wq 806.07;
 - (3) If reclamation is proposed, the groundwater monitoring plan required by Env-Wq 809.02;
 - (4) A statement signed by the applicant certifying:
 - a. Compliance with the notification provisions of Env-Wq 803.01;
 - b. That all operators of the site will be instructed on the requirements of Env-Wq 800 prior to working at the site;
 - c. That a copy of the application has been given to the governing body of the municipality in which the activity is proposed to occur; and
 - d. That the information submitted is true, complete, and not misleading;

- (5) A copy of the Natural Resource Conservation Service (NRCS) county soils survey map, or portion thereof, with the area(s) of proposed activity clearly delineated, including a description of each soil type found on the site;
 - (6) A description of the soil profile characteristics of each soil test pit or auger boring as required in Env-Wq 806.10(c);
 - (7) The results of the soil analyses conducted in accordance with Env-Wq 806.10(d);
 - (8) Written verification from the department of resources and economic development, natural heritage bureau (DRED-NHB) indicating whether or not threatened or endangered species exist on the site;
 - (9) For each reclamation site and forest application site, a site-specific soil map or survey prepared in accordance with the Site-Specific Soil Mapping Standards for New Hampshire and Vermont, Society of Soil Scientists of Northern New England Special Publication No. 3, dated February 2011;
 - (10) A list of all other state permits that are required for the proposed site and evidence that applications for those permits have been submitted; and
 - (11) The name and address of the locally-accessible place where all information required in Env-Wq 806.01 can be reviewed.
- (d) The applicant shall make a copy of the complete application and all supporting information available at a locally-accessible place.
- (e) If the applicant is not the property owner, the application shall be accompanied by a written statement in accordance with (f) below, and signed by the owner.
- (f) The written statement shall state that the property owner is aware that the application is being filed and has given permission to the applicant to file the application and to enter upon the land for purposes of site investigation and operation of the land application or stockpile site in the event that the department issues the permit.
- (g) If the applicant is not the generator of the QC sludge to be managed at the site, the application shall be accompanied by a written statement signed by each generator stating that the generator is ultimately responsible for ensuring that the final disposition of the material is performed in accordance with Env-Wq 800 and 40 CFR part 503.
- (h) Each application shall be:
- (1) Signed by the applicant;
 - (2) Submitted in duplicate, provided that the second copy may be submitted electronically; and
 - (3) Accompanied by the fee specified in Env-Wq 806.04.

Env-Wq 806.02 Expiration of Site Permits. A site permit issued by the department shall expire 10 years from the date on which it was issued.

Env-Wq 806.03 Renewal of Site Permits.

- (a) Any person to whom a site permit has been issued who wishes to renew the permit shall apply for a permit modification under Env-Wq 804.08(c) and submit the permit fee required in Env-Wq 806.04 to the department prior to the expiration of the permit.

(b) If the renewal application is submitted prior to the expiration of the permit, the permit holder may continue to operate under the terms of the permit as provided in RSA 541-A:30, I, even if a decision on the renewal application has not been made prior to the expiration date.

(c) If the renewal application is not submitted prior to the expiration of the permit, the permit holder shall discontinue operations under the terms of the permit and apply for a new permit.

Env-Wq 806.04 Permit Fees.

(a) Subject to (e), below, the applicant shall submit a fee in the amount of \$300 with each application for issuance or renewal of a site permit for land application or stockpiling of QC sludge on sites with greater than 10 acres.

(b) Subject to (e), below, the applicant shall submit a fee in the amount of \$150 with each application for issuance or renewal of a site permit for land application or stockpiling of QC sludge on sites with greater than 5 but less than or equal to 10 acres.

(c) Subject to (e), below, the applicant shall submit a fee in the amount of \$100 with each application for issuance or renewal of a site permit for land application or stockpiling of QC sludge on sites with 5 or fewer acres.

(d) Fees, if paid by check or money order, shall be made payable to "Treasurer-State of NH."

(e) Sites where only QC sludge from New Hampshire political subdivisions is land applied shall be exempt from the fees specified in (a) through (c), above.

Env-Wq 806.05 Criteria for Review. The department shall issue a site permit if it determines that:

(a) All applicable requirements of Env-Wq 800 have been met;

(b) If the applicant is other than the property owner, the owner has given permission to the applicant to file the application and to enter upon the land for purposes of site investigation and operation of the site in the event the department issues the permit;

(c) The applicant has applied for all other state permits that are necessary for the operation of the site;

(d) Management of QC sludge at the site in accordance with the application will not violate any statutes or rules implemented by the department;

(e) The applicant has not been convicted of a misdemeanor under any statute administered by the department within the 5 years prior to the date of application, or of a felony in any state or federal court during the 10 years prior to the date of application;

(f) The applicant has paid all fees and administrative, civil, or criminal penalties owed to the department;

(g) The applicant has submitted all test results and reports required for a site permit pursuant to Env-Wq 806.01; and

(h) The proposed use of QC sludge will not adversely affect threatened or endangered species.

Env-Wq 806.06 Site Plans. Site plans required under Env-Wq 806.01(c)(1) shall be based upon a municipal tax map, a surveyed plan, or other scaled drawing that:

(a) Identifies the proposed site location at a scale appropriate to delineate the information clearly; and

(b) Shows the following:

- (1) A locus map which identifies the proposed site location at a scale appropriate to delineate the information clearly;
- (2) The total land area, in acres, to be used for land application or stockpiling;
- (3) The land area of each field, in acres, identified by unique field designation(s) and corresponding crop(s) proposed to be grown;
- (4) Access roads, access control measures, and buffer distances;
- (5) Proposed stockpile location(s);
- (6) Any easements that exist on the property;
- (7) Proposed measures to control surface water runoff to or from the site and stockpile locations, if applicable;
- (8) All instances of the following on the proposed site and within 500 feet of the site:
 - a. Roads;
 - b. Property lines;
 - c. Dwellings and structures;
 - d. Water supply wells;
 - e. All surface waters, by name and location and, if applicable, designated river classification under RSA 483, New Hampshire rivers management and protection program; and
 - f. The names and mailing addresses of all abutters and all property owners;
- (9) All soil test pit and auger boring locations and the information required by Env-Wq 806.10(c);
- (10) The location of any 100-year flood plain as defined and delineated by the flood insurance rate maps published by the Federal Emergency Management Agency;
- (11) The scale of the plan;
- (12) An arrow indicating which direction on the plan is north;
- (13) The approximate location of all poorly and very poorly drained soils on the site; and
- (14) If reclamation is proposed, the items required in the groundwater monitoring plan specified in Env-Wq 809.02(b).

Env-Wq 806.07 Management Plans. Each management plan required under Env-Wq 806.01(c)(2) shall include the following:

- (a) The normal hours of operation of the site;
- (b) The method of application, if land applying;
- (c) Stockpiling management provisions, if applicable;

- (d) The name of the generator(s) and the corresponding sludge quality certification number(s) for any QC sludge that will be received at the site;
- (e) An estimate of the maximum amount of nitrogen, or phosphorus if the limiting nutrient, that will be applied on an annual basis to meet the nutrient requirements of the site;
- (f) A description of all QC sludge mixing activities that are proposed for the site;
- (g) A detailed odor control plan explaining:
 - (1) The procedures that will be used to address and resolve any odor complaints;
 - (2) The name, mailing address, and daytime telephone number of the individual(s) who will be responsible for responding to odor complaints; and
 - (3) Site management techniques that will be employed to minimize odors;
- (h) A nutrient management plan, for the final QC sludge mixture to be land applied for each field, specific for each crop or vegetation type, containing the following information:
 - (1) The crops or vegetation to be grown;
 - (2) A copy of the farm or site nutrient management recommendations developed in accordance with guidelines of UNH cooperative extension, U.S. Department of Agriculture (USDA), NH department of agriculture, Natural Resources Conservation Service (NRCS), or crop advisor certified by American Society of Agronomy under the Certified Crop Adviser or Certified Professional Agronomist certification programs;
 - (3) The agronomic rate calculations for land application of QC sludge on agricultural lands, performed in accordance with the "Best Management Practices: Biosolids" published by the UNH cooperative extension in July 2014;
 - (4) The agronomic rate calculations for land application of QC sludge on forested land or for reclamation, performed in consultation with UNH cooperative extension, USDA, NH department of agriculture, NRCS, or forester certified by the American Society of Foresters;
 - (5) The proposed disposition of crops grown;
 - (6) The proposed type and amount of all other soil amendments and nutrient sources to be used on the site;
 - (7) For each field, the proposed annual nitrogen loading, or phosphorus if the limiting nutrient, in pounds per acre and, except for sites where only QC sludge that is also certified as low metals is applied, an estimate of the annual metals loading; and
 - (8) Except for sites where only QC sludge that is also certified as low metals is applied, the total cumulative metals' loading to date; and
- (i) Any other best management practice(s) that will be implemented at the site to ensure compliance with Env-Wq 800.

Env-Wq 806.08 Land Application Standards.

- (a) QC sludge shall be land applied at rates that conform to the approved nutrient management plan for the site permit pursuant to Env-Wq 806.07(h) and the annual updated plan required by Env-Wq 806.12(a)(5).

(b) No QC sludge shall be applied on frozen or snow-covered ground or when the ground is saturated due to precipitation or flooding.

(c) No QC sludge shall be applied on agricultural land that has a slope greater than 15 percent, that is, a 15 foot rise in 100 feet.

(d) QC sludge spread on agricultural land that has a slope greater than 8 percent shall contain a minimum of 15 percent solids or be subsurface injected.

(e) QC sludge shall be spread in an even layer so as not to result in ponding or runoff of material.

(f) QC sludge that is to be land applied shall be processed to minimize visible or identifiable plastics or other non-biodegradable solids.

(g) No QC sludge shall be applied on very poorly drained soils.

(h) No QC sludge shall be applied in the floodway, defined as the stream channel plus that portion of the overbanks that must be kept free from encroachment in order to discharge the one percent annual chance flood without increasing flood levels by more than one foot.

(i) Animals shall not be grazed on land on which QC sludge has been land applied until 45 days after the last application of QC sludge unless methods to reduce adherence to the crop or vegetation are used in conformance with the approved management plan.

(j) Unless immediate incorporation is required by RSA 483, New Hampshire rivers management and protection program, QC sludge shall be incorporated into the soil within 48 hours of spreading unless it is used for top dressing.

(k) Each reclamation and forest site shall be posted, for the life of the permit, with signs that:

(1) Contain the name and telephone number of the operator and the name and address of the owner or lessee of the property;

(2) State "This is a sludge land application site";

(3) Are printed in block letters no less than 2 inches in height; and

(4) Are posted not more than 100 yards apart on all sides and at all gates, bars, and commonly-used entrances.

(l) Except for sites where only QC sludge that is also certified as low metals is applied, all QC sludge to be land applied shall not exceed any of the following lifetime cumulative pollutant loading rates:

(1) For arsenic, 10 kilograms per hectare or 9 pounds per acre;

(2) For cadmium, 5 kilograms per hectare or 4.5 pounds per acre;

(3) For chromium, 300 kilograms per hectare or 268 pounds per acre;

(4) For copper, 300 kilograms per hectare or 268 pounds per acre;

(5) For lead, 200 kilograms per hectare or 178.6 pounds per acre;

(6) For mercury, 5.6 kilograms per hectare or 5.0 pounds per acre;

(7) For molybdenum, 18 kilograms per hectare or 16 pounds per acre;

(8) For nickel, 100 kilograms per hectare or 89.3 pounds per acre;

- (9) For selenium, 100 kilograms per hectare or 89 pounds per acre; and
- (10) For zinc, 500 kilograms per hectare or 446.5 pounds per acre.
- (m) For QC sludge not generated in New Hampshire, the rate of application shall conform to the application rate allowed by the state of origin or Env-Wq 800, whichever results in the lower loading rate.
- (n) For QC sludge not generated in New Hampshire, groundwater monitoring in accordance with Env-Wq 809 shall be required for sludge management activities that would require groundwater monitoring in the state of origin.
- (o) Subject to the notes in (p), below, no person shall land apply or stockpile QC sludge within the buffer areas specified in Table 806-1:

Table 806-1: Buffer Distances for Land Application

Receptor	Buffer Distance (feet)
For Land Application:	
Rivers protected under RSA 483	250
Surface Waters not protected under RSA 483	125 ^a
Non-tidal Drainage Ditch	33
Community Wells ^b	400
Other Wells	300
Surface Drinking Water Source	500
Property Lines	100 ^c
Public Roads other than Federal Interstate Highways	25
Federal Interstate Highways	10
On-site Occupied Dwelling	100
Off-site Occupied Dwelling:	
If used for top dressing	500 ^d
If incorporated within 48 hours	200 ^d
Bedrock	2
Groundwater Depth:	
Land Application	2 ^e
Reclamation	4 ^e
For Stockpiling or Field Storage:	
Surface Drinking Water Source	500
Nearest Occupied Dwelling	500 ^f
Nearest Off-site Well	500 ^g
Property Line	100 ^c
Bedrock	4
Groundwater Depth	2 ⁱ
Rivers protected under RSA 483	250
Surface waters not protected under RSA 483	250 ^h
Non-tidal Drainage Ditch	100

- (p) The following shall apply to Table 806-1:
- (1) The letter “a” shall indicate that the distance to surface waters not protected under RSA 483 may be reduced from 125 feet to 75 feet if the material is incorporated within 48 hours and the slope is less than 8 percent;
- (2) The letter “b” shall indicate those community public water supply wells that withdraw greater than 57,600 gallons over a 24-hour period;

- (3) The letter “c” shall indicate that the distance to property lines may be reduced through written agreement with affected party(ies);
- (4) The letter “d” shall indicate that the distance to an off-site occupied dwelling may be reduced to 100 feet through written agreement with affected parties;
- (5) The letter “e” shall indicate that this shall be the distance to the groundwater at the time of application of sludge;
- (6) The letter “f” shall indicate that the distance to the nearest occupied dwelling shall be as far as practical beyond 500 feet, but can may be reduced below 500 feet with the occupant’s prior written consent;
- (7) The letter “g” shall indicate that the distance to the nearest well shall be as far as practical, but in no case closer than 500 feet;
- (8) The letter “h” shall indicate that the distance to surface waters not protected under RSA 483 may be reduced to 125 feet if the slope of the land to the surface water is less than 5% and a vegetated buffer strip of at least 25 feet is maintained between the stockpile and the surface water; and
- (9) The letter “i” shall indicate that the distance is to the seasonal high water table.

Env-Wq 806.09 Sludge Stockpiling.

- (a) Any person stockpiling QC sludge for longer than 7 days shall cover the stockpile with an odor control material, such as lime, wood ash that has been approved for such use pursuant to Env-Sw 1700, or cement kiln dust, to minimize odors.
- (b) Stockpiles of QC sludge shall be maintained to minimize surface water run-on and run-off.
- (c) Stockpiling of QC sludge shall not be permitted for greater than 48 hours on the 100-year flood plain as defined and delineated by the flood insurance rate maps published by the Federal Emergency Management Agency.
- (d) Stockpiling of QC sludge shall not be permitted on any poorly or very poorly drained soils.

Env-Wq 806.10 Soil Testing.

- (a) One soil test pit or auger boring shall be taken, to a depth of at least 40 inches, for each soil mapping unit present on the NRCS county soils map, but no less than one every 5 acres.
- (b) One soil test pit or auger boring shall be taken, to a depth of at least 4 feet, for each area proposed for stockpiling.
- (c) An analysis of the soil test pits or auger borings required by (a) and (b), above, shall be performed that includes a description of the soil profile characteristics, depth to seasonal high water table, and depth to bedrock.
- (d) Soil samples from each field proposed to be used for the land application of QC sludge shall be collected and analyzed in accordance with (f), below, within 6 months prior to submittal of the initial permit application.
- (e) Soil samples from each field upon which QC sludge has been applied shall be collected at the end of the permit term or prior to the first land application of sludge under a permit renewed in accordance with Env-Wq 804.08(c).

(f) The soil samples collected pursuant to (d) or (e), above, shall be analyzed by a laboratory using the applicable method(s) found in EPA SW-846 for the following constituents and reported in milligrams per kilogram, dry weight:

- (1) Total Arsenic;
- (2) Total Cadmium;
- (3) Total Chromium;
- (4) Total Copper;
- (5) Total Lead;
- (6) Total Mercury;
- (7) Total Molybdenum;
- (8) Total Nickel;
- (9) Total Selenium; and
- (10) Total Zinc.

(g) Soil samples from each field used for land application shall be collected on a yearly basis no more than 90 days prior to the initial application for that year and analyzed through the UNH cooperative extension soil testing program, or by a laboratory using a method that produces similar results to those produced by the UNH cooperative extension soil testing program, for:

- (1) Soil acidity, measured as pH;
- (2) Mehlich buffer lime requirement;
- (3) Calcium;
- (4) Magnesium;
- (5) Potassium;
- (6) Phosphorus; and
- (7) Organic matter.

Env-Wq 806.11 Recordkeeping.

(a) Every site permit holder shall maintain records of each load of QC sludge received at the site, including identification of:

- (1) The date received;
- (2) The name and hauler permit number, if applicable, of the hauler delivering the load;
- (3) The generator and quantity of each load of QC sludge received, in wet tons, and percent solids;
- (4) The sludge quality certification number(s); and
- (5) The date land applied and the amount spread on each field.

(b) Except for sites where only QC sludge that is also certified as low metals is applied, every site permit holder shall maintain records of the annual and cumulative metal loadings for the site on a field by field basis, based on the following:

- (1) To determine annual metals loadings, the permit holder shall use the highest concentration of each metal observed on a dry weight basis, based on testing performed by the generator(s) during the previous 12 months; and
- (2) The permit holder shall determine cumulative load by summing annual loadings as calculated above.

(c) The permit holder shall retain and make available to the department for review during business hours all site plans, management plans, and records. If the department believes that violations of RSA 485-A or these rules relative to sludge management have occurred, the department shall require the permit holder to submit copies of all records.

(d) The permit holder shall retain all site plans, management plans, and records for a minimum of 5 years after the expiration of the permit(s) to which they relate.

Env-Wq 806.12 Reporting.

(a) At least 14 days prior to commencement of each yearly land application activity, the permit holder shall submit the following information to the department for each site:

- (1) The site name and address;
- (2) The name of permit holder;
- (3) The sludge quality certification number of each QC sludge to be land applied;
- (4) The permit number for the site; and
- (5) An updated nutrient management plan prepared in accordance with Env-Wq 806.07(h).

(b) Each site permit holder shall submit an annual report for each site to the department by the last business day of January for each calendar year in which the permit is valid, regardless of whether or not the site received or processed QC sludge during the previous calendar year.

(c) The annual report shall contain the following information:

- (1) The site location, including address and town;
- (2) The permit number;
- (3) The owner's name;
- (4) The crops grown for each field and the crop disposition;
- (5) The name and sludge quality certification number, if applicable, of each generator;
- (6) The quantity of QC sludge in wet and dry tons, applied to each field, from each generator;
- (7) The total quantity of QC sludge, in wet and dry tons, applied to the entire site, from each generator;

(8) Except for sites where only QC sludge that is also certified as low metals is applied, the annual metals loading and cumulative metals loading to date for each field, calculated in accordance with Env-Wq 806.11(b); and

(9) For reclamation sites, the groundwater monitoring report as required by Env-Wq 809.04(c).

(d) If any of the information differs from that previously supplied to the department concerning the activity, the permit holder shall note those differences in the annual report.

PART Env-Wq 807 SLUDGE QUALITY CERTIFICATION REQUIREMENTS

Env-Wq 807.01 Sludge Quality Certification Application. To apply for a sludge quality certification, the generator shall provide 2 copies of the following to the department:

- (a) The name and address of the facility, such as a wastewater treatment plant or other facility, that has generated or will generate the sludge;
- (b) The name, title, and telephone number of the operator of the facility;
- (c) If the generator is a POTW, a list and brief description of all industrial permit holders and each permit holder's local limits;
- (d) If the generator is an industrial wastewater treatment facility, the common chemical name of all chemicals being discharged to the treatment facility;
- (e) The quantity of sludge, in dry tons, generated annually by the generating facility for the previous 2 calendar years;
- (f) If the sludge is not generated in New Hampshire, certification that the sludge meets the chemical standards for land application in the state of origin;
- (g) If the sludge contains human waste, a description of the process to achieve class A or class B pathogen reduction requirements and vector attraction reduction requirements, including a citation to the applicable 40 CFR part 503 section; and
- (h) A sludge quality report that includes the following:
 - (1) A description of the generating facility and sludge treatment process;
 - (2) A chronological summary of analytical data from the previous 3 years, if available, for each detected chemical, presented in tabular form and by category; and
 - (3) The results of testing required by Env-Wq 807.06, including laboratory reports, presented categorically as in (2), above, and summarized in tabular form.

Env-Wq 807.02 Sludge Quality Certification Fees.

- (a) Subject to (c), below, the applicant for sludge quality certification shall submit a fee in the amount of \$1,000 with the application.
- (b) Fees, if paid by check or money order, shall be made payable to "Treasurer-State of NH."
- (c) Political subdivisions whose facilities are permitted by the department under RSA 485-A:13 shall be exempt from the fee specified in (a), above.

Env-Wq 807.03 Criteria for Review. The department shall issue a sludge quality certification to the generating facility if it determines that the information submitted demonstrates that the sludge:

- (a) Is not a hazardous waste as defined in RSA 147-A:2, VII;
- (b) If derived from human waste, consistently meets the pathogen and vector attraction requirements specified in the application;
- (c) Does not exceed the following concentrations, expressed as the total concentration on a dry weight basis:
 - (1) For total arsenic, 32 mg/kg;
 - (2) For total cadmium, 14 mg/kg;
 - (3) For total chromium, 1,000 mg/kg;
 - (4) For total copper, 1,500 mg/kg;
 - (5) For total lead, 300 mg/kg;
 - (6) For total mercury, 10 mg/kg;
 - (7) For total molybdenum, 35 mg/kg;
 - (8) For total nickel, 200 mg/kg;
 - (9) For total selenium, 28 mg/kg;
 - (10) For total zinc, 2,500 mg/kg;
 - (11) For polychlorinated biphenyls (PCB), 1.0 mg/kg; and
 - (12) For dibenzodioxins and dibenzofurans, 27 ng/kg TEQ for all congeners determined by EPA method 1613 using the 1989 toxic equivalency factors;
- (d) Is of sufficiently consistent quality such that for the constituents in (c), above, the mean concentration for data submitted under Env-Wq 807.01(h) plus one standard deviation from the mean does not exceed the concentration specified in (c), above;
- (e) Is not a threat to public health, safety, or the environment from other chemical contaminants when assessed according to risk methodologies described in the United States Environmental Protection Agency's (US EPA's) Soil Screening Guidance, EPA/540/R-96/018 dated April 1996, the American Society for Testing and Materials E-1739-95, Guide for Risk-Based Corrective Action Applied to Petroleum Release Sites dated November, 1995, or equivalent approved pursuant to Env-Wq 811;
- (f) If not generated in New Hampshire, meets the chemical standards of the state of origin for the equivalent category of sludge;
- (g) If the sludge is to be certified for reclamation use, contains enteric virus concentrations of less than one plaque-forming unit per 4 grams of solid on a dry weight basis, provided that class A biosolids shall be deemed to have met this standard; and
- (h) If the sludge is to be certified as low metals, does not exceed the following concentrations, expressed as the total concentration on a dry weight basis:
 - (1) For total arsenic, 10 mg/kg;
 - (2) For total cadmium, 10 mg/kg;
 - (3) For total chromium, 160 mg/kg;

- (4) For total copper, 1,000 mg/kg;
- (5) For total lead, 270 mg/kg;
- (6) For total mercury, 7 mg/kg;
- (7) For total molybdenum, 18 mg/kg;
- (8) For total nickel, 98 mg/kg;
- (9) For total selenium, 18 mg/kg; and
- (10) For total zinc, 1,780 mg/kg.

Env-Wq 807.04 Expiration and Renewal of Sludge Quality Certification.

- (a) A sludge quality certification shall expire 5 years from the date of issuance.
- (b) To apply for renewal of sludge quality certification, the generator shall submit to the department, prior to expiration of the current sludge quality certification, the following:
 - (1) The information required by Env-Wq 807.01;
 - (2) A summary in tabular form of all analytical data accumulated as a result of the testing requirements of Env-Wq 807.05 during the most recent certification term; and
 - (3) A statistical evaluation for each regulated analyte, including mean and standard deviation.

Env-Wq 807.05 Testing Required for Initial Certification.

- (a) Subject to (b), below, with an application for a sludge quality certification the applicant shall submit the results of the analyses of the number of representative samples of sludge from the generating facility determined pursuant to (b) or (c), below, as applicable, taken at least 30 days apart within the 12 months prior to the date of application and analyzed for the constituents in Env-Wq 807.06.
- (b) The number of representative samples shall be based on the total annual sludge production, as follows:
 - (1) For total annual sludge production of less than 1,600 dry tons, 2 representative samples; and
 - (2) For total annual sludge production of 1,600 dry tons or more, 4 representative samples.
- (c) For batch processes or specified quantities of sludge proposed for land application, the applicant may collect representative composite sample(s) from each batch or specified quantity on a one time basis. The number of composite samples shall be based on an estimate of the quantity of sludge proposed for sludge quality certification as shown in table 807-1, below:

Table 807-1: Number of Required Samples for Batch Processes

Estimated Quantity of Sludge (dry tons)	Number of Samples Required
less than 320	one composite sample
320 to 1600	2 composite samples
more than 1600	4 composite samples

- (d) All samples shall be collected in accordance with “The Wastewater Treatment Plant Operators Guide to Biosolids Sampling Plans” published by the New England Interstate Water Supply and Pollution Control Commission, dated September 2006, or equivalent approved pursuant to Env-Wq 811.

Env-Wq 807.06 Testing: Constituents Required For All QC Sludge.

(a) Subject to (b), below, sludge samples collected pursuant to Env-Wq 807.05 or Env-Wq 807.07 shall be analyzed for the constituents listed in Table 807-2, below, in accordance with the methods specified.

(b) Testing for enteric viruses as specified in Table 807-2, section G shall be required only for generators of class B biosolids requesting certification of the biosolids for reclamation uses.

(c) The constituents required to be analyzed shall be as follows:

Table 807-2: Compounds, Chemical Abstract Service Registration Number (CAS),
Analytical Methods, and Detection Limits

#	Compound	CAS	Analytical Method	Detection Limit (mg/kg)
Section A. Volatile Organic Compounds				
1	Dichlorodifluoromethane	75-71-8	SW846 - 8000 series	2.0
2	Chloromethane	74-87-3	SW846 - 8000 series	2.0
3	Vinyl chloride	75-01-4	SW846 - 8000 series	2.0
4	Bromomethane	74-83-9	SW846 - 8000 series	2.0
5	Chloroethane	75-00-3	SW846 - 8000 series	2.0
6	Trichlorofluoromethane	75-69-4	SW846 - 8000 series	2.0
7	Diethyl ether	60-29-7	SW846 - 8000 series	2.0
8	Acetone	67-64-1	SW846 - 8000 series	10.0
9	1,1-Dichloroethene	75-35-4	SW846 - 8000 series	2.0
10	Methylene chloride	75-09-2	SW846 - 8000 series	2.0
11	Carbon disulfide	75-15-0	SW846 - 8000 series	2.0
12	Methyl-tert-butylether (MTBE)	1634-04-4	SW846 - 8000 series	2.0
13	trans-1,2-Dichloroethene	156-60-5	SW846 - 8000 series	2.0
14	1,1-Dichloroethane	75-34-3	SW846 - 8000 series	2.0
15	2-Butanone (MEK)	78-93-3	SW846 - 8000 series	10.0
16	2,2-Dichloropropane	590-20-7	SW846 - 8000 series	2.0
17	cis-1,2-Dichloroethene	156-59-2	SW846 - 8000 series	2.0
18	Chloroform	67-66-3	SW846 - 8000 series	2.0
19	Bromochloromethane	74-97-5	SW846 - 8000 series	2.0
20	Tetrahydrofuran (THF)	109-99-9	SW846 - 8000 series	10.0
21	1,1,1-Trichloroethane	71-55-6	SW846 - 8000 series	2.0
22	1,1-Dichloropropene	563-58-6	SW846 - 8000 series	2.0
23	Carbon tetrachloride	56-23-5	SW846 - 8000 series	2.0
24	1,2-Dichloroethane	107-06-2	SW846 - 8000 series	2.0
25	Benzene	71-43-2	SW846 - 8000 series	2.0
26	Trichloroethene	79-01-6	SW846 - 8000 series	2.0
27	1,2 Dichloropropane	78-87-5	SW846 - 8000 series	2.0
28	Dichlorobromomethane	75-27-4	SW846 - 8000 series	2.0
29	Dibromomethane	74-95-3	SW846 - 8000 series	2.0
30	4-Methyl-2-pentanone (MIBK)	108-10-1	SW846 - 8000 series	10.0
31	Cis-1,3-Dichloropropene	10061-01-5	SW846 - 8000 series	2.0
32	Toluene	108-88-3	SW846 - 8000 series	2.0
33	trans-1,3-Dichloropropene	10061-02-6	SW846 - 8000 series	2.0
34	1,1,2-Trichloroethane	79-00-5	SW846 - 8000 series	2.0
35	2-Hexanone	591-78-6	SW846 - 8000 series	10.0

#	Compound	CAS	Analytical Method	Detection Limit (mg/kg)
36	1,3-Dichloropropane	142-28-9	SW846 - 8000 series	2.0
37	Tetrachloroethene	127-18-4	SW846 - 8000 series	2.0
38	Dibromochloromethane	128-48-1	SW846 - 8000 series	2.0
39	1,2-Dibromoethane	106-93-4	SW846 - 8000 series	2.0
40	Chlorobenzene	108-90-7	SW846 - 8000 series	2.0
41	1,1,1,2-Tetrachloroethane	630-20-6	SW846 - 8000 series	2.0
42	Ethylbenzene	100-41-4	SW846 - 8000 series	2.0
43	m&p-Xylene	108-38-3 106-42-3	SW846 - 8000 series	2.0
44	o-Xylene	95-47-6	SW846 - 8000 series	2.0
45	Styrene	100-42-5	SW846 - 8000 series	2.0
46	Bromoform	75-25-2	SW846 - 8000 series	2.0
47	Isopropylbenzene	98-82-8	SW846 - 8000 series	2.0
48	1,1,2,2-Tetrachloroethane	79-34-5	SW846 - 8000 series	2.0
49	1,2,3-Trichloropropane	96-18-4	SW846 - 8000 series	2.0
50	n-Propylbenzene	98-06-6	SW846 - 8000 series	2.0
51	Bromobenzene	108-86-1	SW846 - 8000 series	2.0
52	1,3,5-Trimethylbenzene	108-67-8	SW846 - 8000 series	2.0
53	2-Chlorotoluene	95-49-8	SW846 - 8000 series	2.0
54	4-Chlorotoluene	106-43-4	SW846 - 8000 series	2.0
55	tert-Butylbenzene	104-51-8	SW846 - 8000 series	2.0
56	1,2,4-Trimethylbenzene	95-63-6	SW846 - 8000 series	2.0
57	sec-Butylbenzene	135-98-8	SW846 - 8000 series	2.0
58	p-Isopropyltoluene	99-87-6	SW846 - 8000 series	2.0
59	1,3-Dichlorobenzene	541-73-1	SW846 - 8000 series	2.0
60	1,4-Dichlorobenzene	106-46-7	SW846 - 8000 series	2.0
61	n-Butylbenzene	104-51-8	SW846 - 8000 series	2.0
62	1,2-Dichlorobenzene	95-50-1	SW846 - 8000 series	2.0
63	1,2-Dibromo-3-chloropropane	96-12-8	SW846 - 8000 series	2.0
64	1,2,4-Trichlorobenzene	120-82-1	SW846 - 8000 series	2.0
65	Hexachlorobutadiene	87-68-3	SW846 - 8000 series	2.0
66	Naphthalene	91-20-3	SW846 - 8000 series	2.0
67	1,2,3-Trichlorobenzene	87-61-6	SW846 - 8000 series	2.0
Section B. Semi-volatile Compounds				
68	1,2-Diphenylhydrazine (as Azobenzene)	122-66-7	SW846 - 8000 series	2.5
69	2,4,5-Trichlorophenol	95-95-4	SW846 - 8000 series	2.5
70	2,4,6-Trichlorophenol	88-06-2	SW846 - 8000 series	2.5
71	2,4-Dichlorophenol	120-83-2	SW846 - 8000 series	2.5
72	2,4-Dimethylphenol	105-67-9	SW846 - 8000 series	2.5
73	2,4-Dinitrophenol	51-28-5	SW846 - 8000 series	25.0
74	2,4-Dinitrotoluene	121-14-2	SW846 - 8000 series	2.5
75	2,6-Dinitrotoluene	606-20-2	SW846 - 8000 series	2.5
76	2-Chloronaphthalene	91-59-7	SW846 - 8000 series	2.5
77	2-Chlorophenol	95-97-8	SW846 - 8000 series	2.5
78	2-Methylnaphthalene	91-57-6	SW846 - 8000 series	2.5
79	2-Methylphenol (o-Cresol)	95-48-7	SW846 - 8000 series	5.0
80	2-Nitroaniline	88-74-4	SW846 - 8000 series	5.0

#	Compound	CAS	Analytical Method	Detection Limit (mg/kg)
81	2-Nitrophenol	88-75-5	SW846 - 8000 series	5.0
82	3,3'-Dichlorobenzidine	91-94-1	SW846 - 8000 series	10.0
83	3-Nitroaniline	99-09-2	SW846 - 8000 series	5.0
84	3&4-Methylphenol (m&p-Cresol)	106-44-5	SW846 - 8000 series	5.0
85	4,6-Dinitro-2-methylphenol	534-52-1	SW846 - 8000 series	20.0
86	4-Bromophenyl phenylether	85-68-7	SW846 - 8000 series	10
87	4-Chloro-3-methylphenol	59-50-7	SW846 - 8000 series	10
88	4-Chloroaniline	106-47-8	SW846 - 8000 series	2.5
89	4-Chlorophenyl phenylether	7005-72-3	SW846 - 8000 series	10
90	4-Nitroaniline	100-01-6	SW846 - 8000 series	5.0
91	4-Nitrophenol	100-02-7	SW846 - 8000 series	12
92	Acenaphthene	83-32-9	SW846 - 8000 series	5.0
93	Acenaphthylene	208-96-8	SW846 - 8000 series	5.0
94	Anthracene	120-12-7	SW846 - 8000 series	5.0
95	Benzidine	92-87-5	SW846 - 8000 series	25.0
96	Benzo (a) anthracene	56-55-3	SW846 - 8000 series	2.5
97	Benzo (a) pyrene	50-32-8	SW846 - 8000 series	2.5
98	Benzo (b) fluoranthene	205-99-2	SW846 - 8000 series	2.5
99	Benzo (g,h,i) perylene	191-24-2	SW846 - 8000 series	2.5
100	Benzo (k) fluoranthene	207-08-9	SW846 - 8000 series	2.5
101	Bis (2-chloroethoxy) methane	111-91-1	SW846 - 8000 series	5.0
102	Bis (2-chloroethyl) ether	111-44-4	SW846 - 8000 series	2.5
103	Bis (2-chloroisopropyl) ether	39638-32-9	SW846 - 8000 series	2.0
104	Bis (2-ethylhexyl) phthalate	117-81-7	SW846 - 8000 series	5.0
105	Butyl Benzyl phthalate	85-68-7	SW846 - 8000 series	5.0
106	Carbazole	86-74-8	SW846 - 8000 series	2.5
107	Chrysene	218-01-9	SW846 - 8000 series	2.5
108	Di-n-butyl phthalate	84-74-2	SW846 - 8000 series	5.0
109	Di-n-octyl phthalate	117-84-0	SW846 - 8000 series	5.0
110	Dibenzo (a,h) anthracene	53-70-3	SW846 - 8000 series	2.5
111	Dibenzofuran	132-64-9	SW846 - 8000 series	2.5
112	Diethyl phthalate	84-66-2	SW846 - 8000 series	5.0
113	Dimethyl phthalate	131-11-3	SW846 - 8000 series	5.0
114	Fluoranthene	206-44-0	SW846 - 8000 series	2.5
115	Fluorene	86-73-7	SW846 - 8000 series	2.5
116	Hexachlorobenzene	118-74-1	SW846 - 8000 series	2.5
117	Hexachlorocyclopentadiene	77-47-4	SW846 - 8000 series	5.0
118	Hexachloroethane	67-72-1	SW846 - 8000 series	2.5
119	Indeno (1,2,3-cd) pyrene	193-39-5	SW846 - 8000 series	2.5
120	Isophorone	78-59-1	SW846 - 8000 series	2.5
121	N-Nitroso-di-n-propylamine	621-64-7	SW846 - 8000 series	2.5
122	N-Nitrosodimethylamine	62-75-9	SW846 - 8000 series	5.0
123	N-Nitrosodiphenylamine	86-30-6	SW846 - 8000 series	2.5
124	Nitrobenzene	98-95-3	SW846 - 8000 series	2.5
125	Pentachlorophenol	87-86-5	SW846 - 8000 series	5.0
126	Phenanthrene	85-01-8	SW846 - 8000 series	2.5
127	Phenol	108-95-2	SW846 - 8000 series	5.0
128	Pyrene	129-00-0	SW846 - 8000 series	2.5

#	Compound	CAS	Analytical Method	Detection Limit (mg/kg)
Section C. Metals				
129	Total Arsenic	7440-38-2	SW846 6000/7000 series	10
130	Total Cadmium	7440-43-9	SW846 6000/7000 series	1.0
131	Total Chromium	16065-83-1	SW846 6000/7000 series	10
132	Total Copper	7440-50-8	SW846 6000/7000 series	10
133	Total Lead	7439-92-1	SW846 6000/7000 series	11
134	Total Mercury	7439-97-6	SW846 7000 series	0.05
135	Total Molybdenum	7439-98-7	SW846 6000/7000 series	10
136	Total Nickel	7440-02-0	SW846 6000/7000 series	10
137	Total Selenium	7782-49-2	SW846 6000/7000 series	18
138	Total Zinc	7440-66-6	SW846 6000/7000 series	10
139	Total Antimony	7440-36-0	SW846 6000/7000 series	8.0
140	Total Beryllium	7440-41-7	SW846 6000/7000 series	0.1
141	Total Silver	7440-22-4	SW846 6000/7000 series	4.0
142	Total Thallium	7440-28-0	SW846 6000/7000 series	10
Section D. Polychlorinated Biphenyls				
143	PCB-1242	53469-21-9	SW846 - 8000 series	0.7
144	PCB-1254	11097-69-1	SW846 - 8000 series	0.7
145	PCB-1221	11104-28-2	SW846 - 8000 series	0.7
146	PCB-1232	11141-16-5	SW846 - 8000 series	0.7
147	PCB-1248	12672-29-6	SW846 - 8000 series	0.7
148	PCB-1260	11096-82-5	SW846 - 8000 series	0.7
149	PCB-1016	12674-11-2	SW846 - 8000 series	0.7
Section E. Additional Analyses				
150	pH	not applicable (na)	SM-4500-H	na
151	Percent solids	na	SM-2540 G	na
152	nitrate-nitrite	14797-55-8 14797-65-0	SM-4500-NO ₃ SW846 - 9210 EPA 353 -3000 series	30
153	Total Kjeldalh nitrogen	na	SM-4500-N _{org} EPA-351.3	300
154	ammonia nitrogen	na	SM-4500-NH ₃ EPA-350	30
155	Total organic nitrogen	na	calculation	na

#	Compound	CAS	Analytical Method	Detection Limit (mg/kg)
156	potassium	na	SM-3500-K SW846 6000/7000 series	15
157	phosphorus	na	SM-4500-P EPA-365	15
Section F. Dioxins				
158	Total Toxic Equivalent, 2,3,7,8 TCDD	1746-01-6	EPA 1613	5 ppt TEQ
Section G. Enteric Virus				
159	Enteric Virus	na	ASTM D4994-89 (2002)	1 PFU/ 4 grams

(d) The following shall apply to Table 807-2:

- (1) Subject to (2) and (3), below, the detection limit for all the analyses shall be at or below the detection limits specific in Table 807-2;
- (2) If the percent solids in a sludge is below 5%, the results shall be reported in mg/L and the detection limits shall be appropriate to the methodology specified in Table 807-2 for a water matrix; and
- (3) If the detection limit specified in Table 807-2 cannot be achieved by the methodology listed, the department shall accept the detection limits that are routinely achievable.

Env-Wq 807.07 Post-Certification Testing Required For QC Sludge.

(a) The sludge quality certification holder shall analyze the QC sludge from its generating facility at the frequencies specified in Table 807-3, below, for the parameters listed in Table 807-2, section E, and for the metals in Table 807-2, section C, except for antimony, beryllium, silver, and thallium, in accordance with the analytical methods and detection limits specified.

Table 807-3 Frequency of Testing - Land Application

Quantity of Sludge (dry tons)	Frequency
0 - 320	Once per 180 days
320 - 1600	Once per quarter
1600 - 16,000	Once per 60 days
more than 16,000	Once per month

(b) For the purposes of Table 807-3, above, “quantity of sludge” means the total quantity of all sludge generated in a calendar year.

(c) The sludge quality certification holder shall analyze sludge from its generating facility every year for the constituents identified in Table 807-2, sections A, B, D, F, using the analytical methods and detection limits specified in the table.

(d) Generators of class B biosolids proposing to maintain certification of the biosolids for reclamation uses also shall test for enteric viruses as specified in Table 807-2, section G.

Env-Wq 807.08 Additional Testing Required.

(a) The department shall require additional testing when results of testing conducted by the sludge quality certification holder, site permit holder, or the department show that the requirements in Env-Wq 807.03 have not been met.

(b) If additional testing is required under (a), above, the sludge quality certification holder and all site operators who apply the sludge shall cease land application of sludge until the additional testing, performed in accordance with (c), below, demonstrates that the sludge is acceptable for land application according to the standards of Env-Wq 807.03.

(c) The following additional testing shall be done in accordance with the analytical procedures specified in Table 807-2:

(1) Collect and analyze representative samples of sludge from each stockpile at each site that contains the generator's sludge for the constituent(s) of concern and submit results to the department for review and approval prior to resuming land application;

(2) Increase the frequency of testing at the generator's facility for the compound(s) of concern to weekly, and continue the weekly sampling until 4 successive weeks show that the concentration of the constituent(s) of concern meets the standards in Env-Wq 807.03; and

(3) After complying with (2), above, resume land application and increase sampling frequency specified in Env-Wq 807.05 to monthly for the constituent(s) of concern for 6 months.

(d) Subject to (e), below, the department shall remove a constituent from the requirement to be tested annually if it determines, based on all available information, that the constituent is not present in the sludge and is unlikely to be present in the future.

(e) The constituent removed pursuant to (d), above, shall be reinstated to the annual testing regime if:

(1) Any source of wastewater that has the potential to discharge the contaminant is connected to the generating facility; or

(2) Any source of wastewater that is connected to the generating facility changes its processes such that the contaminant may be discharged.

Env-Wq 807.09 Reporting. Each sludge quality certification holder shall submit an annual report to the department by the last business day of January following the issuance of the certificate that contains the following information:

(a) The name and physical address of the facility that generated the QC sludge;

(b) The name and telephone number of the operator of the facility;

(c) The sludge quality certificate number;

(d) The quantity of QC sludge generated, in wet and dry tons;

(e) The results of all testing, including laboratory results, required by the department during the previous year, including laboratory results presented categorically as required in Env-Wq 807.01(h)(3);

(f) For permitted land application sites, the name, location, and amount, in wet and dry tons, where the QC sludge was delivered;

(g) For deliveries of 20 cubic yards or more of class A biosolids and mixtures containing class A biosolids, the name, location, and amount where the material was delivered; and

- (h) The proposed updated label as required under Env-Wq 810.02, if applicable.

Env-Wq 807.10 QC Sludge Land Application and Management Restrictions. QC sludge receiving certification under Env-Wq 807.03 shall be subject to the following restrictions:

- (a) Water treatment sludge shall be land applied only as a mineral component in a mixture of sludge or other organic residuals;
- (b) For class A sludge not used for reclamation, land application rates shall not exceed 200 pounds of nitrogen per acre;
- (c) The following QC sludge or QC sludge mixtures shall be land applied only at a site permitted pursuant to Env-Wq 806:
 - (1) Any QC sludge that contains class B biosolids;
 - (2) Any QC sludge used for reclamation that is applied at rates exceeding 1,500 pounds of nitrogen per acre or that does not have a carbon-to-nitrogen ratio between 30:1 and 40:1;
 - (3) Short paper fiber; and
 - (4) Water treatment sludge;
- (d) For short paper fiber not used for reclamation, land application rates shall not exceed 20 dry tons per acre; and
- (e) QC sludge or QC sludge mixtures that are class A with respect to pathogens shall be subject to Env-Wq 810.

PART Env-Wq 808 FACILITY PERMIT REQUIREMENTS

Env-Wq 808.01 Facility Permit Application.

- (a) The person proposing to undertake sludge management activities at a facility shall apply for a facility permit.
- (b) The applicant for a facility permit shall provide the following information on a form obtained from the department:
 - (1) The name, mailing address, and daytime telephone number of the applicant, if an individual;
 - (2) The name, mailing address, and daytime telephone number of the applicant's business;
 - (3) The name and telephone number(s) of the individual who can be reached 24 hours a day in case of an emergency;
 - (4) The location of the proposed facility, including the street address, tax map and lot number, and current deed reference;
 - (5) The name, mailing address, and telephone number(s) of the operator of the facility;
 - (6) The types of sludge management activities being proposed at the facility, including but not limited to disposal, composting, processing, stockpiling, or treating;
 - (7) A description of the intended capacity and life of the facility;

- (8) A history of the use of the land on which the facility is proposed covering 5 years immediately prior to submission of the application; and
 - (9) The intended disposition of the sludge managed and whether sludge quality certification will be sought.
- (c) The applicant shall submit the following with the application:
- (1) If applicable, facility plans and specifications for construction and closure stamped by a professional engineer registered in the State of New Hampshire;
 - (2) A facility plan prepared in accordance with Env-Wq 808.06;
 - (3) A management plan prepared in accordance with Env-Wq 808.07;
 - (4) A statement signed by the applicant certifying that:
 - a. The applicant has complied with the notification provisions of Env-Wq 803.01;
 - b. The operator of the facility has been instructed on the requirements of Env-Wq 800 or shall be so instructed prior to working at the facility;
 - c. A copy of the application has been given to the governing body of the municipality in which the activity is proposed to occur; and
 - d. The information submitted is true, complete, and not misleading;
 - (5) The results of soils testing required by Env-Wq 808.10;
 - (6) Written verification from the department of resources and economic development indicating whether or not any threatened or endangered species exist on the site;
 - (7) For sludge monofills, financial assurance as required by Env-Sw 1400;
 - (8) A copy of the facility closure plan as specified in Env-Wq 808.09;
 - (9) A list and copies of all other state permits that are required for the proposed facility and evidence that applications for those permits have been submitted;
 - (10) The name and address of the locally-accessible place where all the information required in Env-Wq 808.01 can be reviewed;
 - (11) A statement as to whether the applicant has been convicted of a misdemeanor under any statute administered by the department within the 5 years prior to the date of application, or of a felony in any state or federal court during the 10 years prior to the date of application;
 - (12) A copy of the NRCS county soils map, or portion thereof, with the area(s) of proposed activity clearly delineated, including a description of each soil type found on the site; and
 - (13) The groundwater monitoring plan developed in accordance with Env-Wq 809.02, if applicable.
- (d) If the applicant is not the owner, the application shall be accompanied by a written statement signed by the owner stating that the owner is aware that the application is being filed and has given permission to the applicant to file the application and to enter upon the land for purposes of site investigation and operation of the facility in the event that the department issues the permit.

(e) The applicant shall make a copy of the complete application and all supporting information available at a locally-accessible place.

(f) If the applicant is not the generator of the sludge(s), the application shall be accompanied by a written statement signed by each generator stating that the generator is ultimately responsible for ensuring that the final disposition of the material is performed in accordance with these rules and 40 CFR part 503.

(g) Each application shall be:

- (1) Signed by the applicant;
- (2) Submitted in duplicate; and
- (3) Accompanied by the fee specified in Env-Wq 808.04.

Env-Wq 808.02 Expiration of a Facility Permit. A facility permit issued by the department shall expire 10 years from the date on which it was issued.

Env-Wq 808.03 Renewal of a Facility Permit.

(a) Any person to whom a facility permit has been issued who wishes to renew the permit shall apply for a permit modification under Env-Wq 804.08(c) and submit the permit fee required by Env-Wq 808.04 to the department prior to the expiration of the permit.

(b) If the renewal application is submitted prior to the expiration of the permit, the permit holder may continue to operate under the terms of the permit even if a decision on the renewal application has not been made prior to the expiration date.

(c) If the renewal application is not submitted prior to the expiration of the permit, the permit holder shall discontinue operations under the terms of the permit and apply for a new permit.

Env-Wq 808.04 Permit Fees.

(a) Subject to (b), below, the applicant shall submit a fee in the amount of \$1,000 with each application for issuance or renewal of a facility permit.

(b) Any New Hampshire political subdivision that applies for a facility permit or has its sludge managed at a permitted facility shall be exempt from the fee specified in (a), above.

(c) Fees, if paid by check or money order, shall be made payable to "Treasurer-State of NH."

Env-Wq 808.05 Criteria for Review. The department shall issue or renew a facility permit if it determines that the following criteria have been met:

(a) All applicable requirements of the rules have been met;

(b) All state permits which are necessary for the construction and operation of the facility have been applied for;

(c) The management of sludge at the facility, in accordance with the application, will not violate any statutes or rules implemented by the department;

(d) The permit holder has not been convicted of a misdemeanor under any statute administered by the department within the 5 years prior to the date of application, or of a felony in any state or federal court during the 10 years prior to the date of application;

(e) The permit holder has paid all fees and administrative, civil, or criminal penalties owed to the department; and

(f) The sludge management activities that will be conducted at the facility will not adversely affect threatened or endangered species.

Env-Wq 808.06 Facility Plans. A facility plan required under Env-Wq 808.01(c)(2) shall include the following at a scale appropriate to show all information contained on the plan clearly:

- (a) A locus map that identifies the proposed facility location;
- (b) The total available land area, in acres, and the specific acres to be used for facility operations, including proposed stockpile locations;
- (c) Identification of access roads and access control measures, including perimeter fencing and buffer distances;
- (d) Identification of the following within 500 feet of the proposed facility:
 - (1) Roads;
 - (2) Land use;
 - (3) The approximate location of and distance to all dwellings, structures, and water supply wells;
 - (5) Property lines with names and mailing addresses of each abutter; and
 - (4) The name and location of all surface waters, including their designated river classification under RSA 483, New Hampshire rivers management and protection program, if applicable;
- (e) Identification of proposed measures to control surface runoff to or from the facility and stockpile locations, if applicable;
- (f) All soil test pit and auger boring locations and the information required by Env-Wq 808.10(c);
- (g) Identification of all easements or right-of-ways located on the property proposed for the facility;
- (h) The scale of the plan;
- (i) An arrow indicating which direction on the plan is north;
- (j) The location of all poorly and very poorly drained soils; and
- (k) If applicable, the location of the elements of the groundwater monitoring plan required by Env-Wq 809.02(b).

Env-Wq 808.07 Management Plans. A management plan required under Env-Wq 808.01(c)(3) shall include the following:

- (a) The normal hours of operation of the facility;
- (b) Storage or stockpiling provisions, if applicable;
- (c) The quantity of sludge, in wet and dry tons, expected to be received annually;
- (d) The maximum quantity of sludge, in wet and dry tons, the facility is designed to manage annually;
- (e) Additional on-site measures to be taken to control vectors;

(f) A detailed odor control plan explaining:

- (1) The procedures that will be used to address and resolve any odor complaints;
- (2) Additional management techniques employed to minimize odors; and
- (3) The name, address, and telephone number of each individual who will be responsible for responding to odor complaints; and

(g) A copy of the facility contingency plan describing course(s) of action to be followed in case of emergency or other special conditions, including but not limited to equipment breakdowns, fires or explosions, vector infestations, and other incidents having a reasonable probability of occurrence based on the facility location and operations that could threaten human health or safety or the environment.

Env-Wq 808.08 Facility Standards.

(a) New facilities for the treatment or processing of sludge, such as sludge treatment facilities and sludge lagoons, shall be designed and constructed in accordance with the requirements of TR-16, "Guides for the Design of Wastewater Treatment Works" by the New England Interstate Water Pollution Control Commission, dated 2011.

(b) Sludge composting facilities and sludge monofills shall be designed, constructed, operated and closed in accordance with the applicable requirements of Env-Sw 600 and Env-Sw 800, respectively.

(c) Each facility shall:

- (1) Be operated in such a manner so as to minimize the impact on abutters and the surrounding community;
- (2) Be posted with signs that:
 - a. Contain the name and telephone number of the operator and the name and address of the owner or lessee of the property;
 - b. State "This is a Sludge Management Area";
 - c. Are printed with block letters no less than 2 inches in height; and
 - d. Are no more than 100 yards apart on all sides and located at gates, bars, and commonly used entrances;
- (3) Restrict access by a locked gate or cable;
- (4) Be operated such that odors from the facility are minimized;
- (5) Be maintained in a clean and orderly fashion to minimize attraction of vectors; and
- (6) Be closed in accordance with Env-Wq 808.09.

(d) In addition to the requirements in (c), above, each lagoon shall be:

- (1) Fenced around the perimeter to control access;
- (2) Maintained to provide a minimum of 2 feet of freeboard at all times; and
- (3) Bermed on all sides to divert surface drainage away from the lagoon.

(e) No person shall site or operate a facility within the buffer distances specified in Table 808-1:

Table 808-1 Buffer Distances For Processing, Stockpiling or Storage Facilities

Receptor	Buffer Distance (feet)
Nearest Well	500 ^a
Surface Water	250
Surface Drinking Water Source	500
Nearest Occupied Dwelling	500 ^b
Property Line	500 ^b
Groundwater Depth	4 ^c
Bedrock	4

- (f) The following shall apply to Table 808-1:
- (1) The letter “a” shall indicate that the distance to the nearest well shall be as far as practical, but in no case closer than 500 feet;
 - (2) The letter “b” shall indicate that the distance to the nearest occupied dwelling or property line shall be as far as practical beyond 500 feet, but may be reduced below 500 feet with the occupant’s prior written consent; and
 - (3) The letter “c” shall indicate that the distance is to the seasonal high water table.

Env-Wq 808.09 Closure Plans.

- (a) The closure plan required by Env-Wq 808.01(c)(8) shall include the following:
 - (1) The facility identification, including name, mailing address, location, and permit number, if applicable;
 - (2) A description of the procedures for removing all material from the facility, if applicable, and the intended final disposition of the materials;
 - (3) A description of any proposed site work that will be performed to regrade or revegetate the area, or both;
 - (4) The schedule of closure activities and anticipated closure completion date; and
 - (5) A description of how notification will be given to all users of the facility of the termination of operation of the facility.
- (b) At least 60 days prior to the planned cessation of facility operations, the permit holder shall provide written notice of the intent to close the facility to the department and the municipality in which the facility is located.
- (c) The notice shall include the following:
 - (1) The facility identification, including permit number;
 - (2) The date the facility intends to stop receiving sludge and the date the facility intends to stop processing the material(s);
 - (3) A copy of the facility’s approved closure plan or file reference thereto; and
 - (4) The date the facility intends to begin closure activities and estimated closure completion date.

(d) The permit holder shall notify the department and the municipality in which the facility is located in writing when closure is complete.

Env-Wq 808.10 Soil Testing.

(a) One soil test pit or auger boring shall be taken, at a depth of at least 40 inches, for each soil mapping unit present on the NRCS county soils map, but no less than one every 5 acres.

(b) One soil test pit or auger boring shall be taken, to a depth of at least 6 feet, for each area proposed for storage.

(c) An analysis of the soil test pits or auger borings required by (a) and (b), above, shall be performed and shall include a description of the soil profile characteristics, depth to the seasonal high water table, and bedrock.

Env-Wq 808.11 Recordkeeping.

(a) The permit holder shall maintain records of each load of sludge received at the facility, including identification of:

- (1) The date received;
- (2) The name and permit number of the hauler delivering the load;
- (3) The quantity of each load of sludge received from the generator, in wet tons and percent solids; and
- (4) The name of the generator and sludge quality certification number; if applicable.

(b) The permit holder shall maintain all facility plans, management plans, closure plans, and records and make such plans and records available to the department for review during business hours. If the department believes that violations of RSA 485-A or Env-Wq 800 have occurred, the department shall require the permit holder to submit copies of all records.

(c) The permit holder shall retain all facility plans, management plans, closure plans, and records for a minimum of 5 years after closure of the facility.

Env-Wq 808.12 Reporting.

(a) The permit holder shall report a complaint to the department orally within 24 hours of receipt of the complaint and provide a written submission within 5 days of the complaint. Each oral and written report shall contain a description of the complaint, including the exact date and time of the complaint, and steps taken or planned to reduce or eliminate and prevent reoccurrence of the concern.

(b) The permit holder shall submit an annual report for each facility to the department by the last business day of January for each calendar year in which the permit is valid, regardless of whether or not the facility received or processed sludge during the previous calendar year.

(c) The annual facility report shall contain the following information:

- (1) The name and address of the facility;
- (2) The facility's permit number;
- (3) The name of the permit holder;

- (4) The total quantity of sludge, in wet and dry tons, received at the facility from each generator and the sludge quality certification number, if applicable;
 - (5) The quantity of all material distributed, in wet and dry tons; and
 - (6) The groundwater monitoring report required by Env-Wq 809.04(c).
- (d) If any of the information differs from that previously supplied to the department concerning the activity, the permit holder shall note those differences in the annual report.

PART Env-Wq 809 GROUNDWATER MONITORING

Env-Wq 809.01 Applicability. Groundwater shall be monitored at the following:

- (a) Any sludge facility permitted in accordance with Env-Wq 808;
- (b) Reclamation sites; and
- (c) Any other location where sludge management activities are conducted, such as uncovered stockpiles or compost piles containing leachable constituents, that might result in groundwater contamination if not properly managed.

Env-Wq 809.02 Groundwater Monitoring Plan Requirements.

- (a) The applicant shall submit a groundwater monitoring plan that identifies:
 - (1) The constituents to be monitored;
 - (2) The location and identification of all sampling points;
 - (3) The sampling frequency;
 - (4) The sampling methodologies;
 - (5) The analytical methodologies; and
 - (6) The procedures that will be used to establish background concentrations of all constituents required to be monitored. "Background concentrations" means concentrations detected in areas unaffected by the site or facility permitted or to be permitted.
- (b) In addition to (a), above, the applicant shall include the following on the site or facility plan prepared in accordance with Env-Wq 806.06 or Env-Wq 808.06, respectively:
 - (1) The location, elevation, and datum of a bench mark, if a survey is conducted to establish topography;
 - (2) Ground surface spot elevations and contours to show topography, using information from the most recent USGS map or more accurate information, if available;
 - (3) The identification and location of existing and proposed groundwater monitoring wells, showing at least one hydraulically up-gradient and 2 hydraulically down-gradient wells;
 - (4) The identification and location of any surface water sampling points;
 - (5) Groundwater contours that accurately show groundwater flow direction;
 - (6) A description of the method used to develop groundwater contours, including the identification and location of any piezometers;

- (7) A table of water level measurements and elevations found in any piezometers and monitoring wells used to develop the groundwater contours;
- (8) Well construction details of any existing monitoring wells, top of well casing elevations, and measured depth to water table from top of casing; and
- (9) Well construction details of any proposed monitoring wells in accordance with Env-Wq 402.02.

Env-Wq 809.03 Corrective Action Plan.

- (a) If the concentration of any constituent required by the department to be monitored under the groundwater monitoring plan exceeds the background value, in accordance with (b), below, at any down-gradient monitoring well, the permit holder shall:
 - (1) Notify the department within 10 days;
 - (2) Commence monthly monitoring for each constituent for which background has been exceeded at each well where background has been exceeded; and
 - (3) Continue monthly monitoring until the results demonstrate that background has not been exceeded for 2 consecutive months.
- (b) Background shall be deemed to be exceeded when any of the following conditions exist:
 - (1) The concentration of a monitored constituent exceeds the background concentration, as established pursuant to Env-Wq 809.02(a)(6), by more than the analytical detection limit for that constituent;
 - (2) The concentration of a monitored constituent previously undetected using the procedures established pursuant to Env-Wq 809.02(a)(6) exceeds the analytical detection limit by a factor of 1.5; or
 - (3) For nitrate, the concentration exceeds 5 mg/L above the background nitrate concentration or 9 mg/L, whichever is less.
- (c) If the concentration of a constituent detected by the additional monitoring exceeds the background concentration for 2 consecutive months but is below the ambient groundwater quality standard, the permit holder shall:
 - (1) Notify the department within 10 days;
 - (2) For a reclamation site, cease operation immediately;
 - (3) Continue monthly monitoring; and
 - (4) Within 30 days, submit to the department for review and approval a corrective action plan that describes the exceedances, the source(s) of the exceedances, and the proposed measures to be taken to eliminate the exceedances.
- (d) The department shall approve the corrective action plan if it determines that implementation of the proposed plan is reasonably expected to:
 - (1) Achieve compliance with background and ambient groundwater quality standards;

(2) Eliminate any future discharges of the constituent(s) that was causing the exceedances of background values or ambient groundwater quality standards in the groundwater; and

(3) Protect human health and the environment.

(e) The permit holder shall initiate implementation of the approved corrective action plan within 30 days of department approval in accordance with an approved implementation schedule.

(f) If the concentration of any monitored constituent detected in any down-gradient monitoring well exceeds the ambient groundwater quality standard, the permit holder shall:

(1) Cease operation immediately;

(2) Resample each monitoring well where ambient groundwater quality standards have been exceeded;

(3) Notify the department within 10 days;

(4) Commence monthly monitoring of all monitoring wells; and

(5) Within 30 days, submit to the department for review and approval a corrective action plan that describes the exceedances, the source(s) of the exceedances, and the proposed measures to be taken to eliminate the exceedances for review as specified in (d), above.

Env-Wq 809.04 Water Quality Sampling, Analysis, and Reporting.

(a) Analyses shall be performed by a laboratory accredited under National Environmental Laboratory Accreditation Program (NELAP) standards.

(b) Sampling shall be performed in accordance with Env-Wq 402.08.

(c) The results of all regularly-scheduled testing shall be summarized and submitted to the department with the annual report required pursuant to Env-Wq 806.12(c) or Env-Wq 808.12(c), as applicable.

Env-Wq 809.05 Groundwater Monitoring Wells.

(a) Unless the department approves alternative methods pursuant to Env-Wq 811 that are equivalent to (1) and (2), below, monitoring wells shall be designed, installed, and decommissioned in accordance with the practices described in Env-Wq 402.09.

(b) Monitoring wells shall be:

(1) Purged prior to sampling; and

(2) Allowed to equilibrate a minimum of 2 weeks prior to sampling for compliance purposes.

PART Env-Wq 810 REQUIREMENTS FOR CLASS A BIOSOLIDS

Env-Wq 810.01 Requirements for Land Application.

(a) Each person who land applies class A biosolids shall comply with the following:

(1) If the biosolids are not certified as low metals under Env-Wq 807.03, the application rate shall not exceed the annual application limits stated on the label required under Env-Wq 810.02;

(2) Biosolids shall not be applied within 35 feet of surface water;

(3) Biosolids shall not be land applied or stockpiled within 250 of a river protected under RSA 483; and

(4) Biosolids land applied within the protective corridor of a river protected under RSA 483 shall be immediately incorporated into the soil.

(b) In addition to (a), above, each person who land applies class A biosolids on a contiguous area of more than 5 acres shall:

(1) Obtain and follow the nutrient recommendation from UNH cooperative extension, USDA, NH department of agriculture, NRCS, or other crop advisors certified by American Society of Agronomy under the Certified Crop Adviser or Certified Professional Agronomist certification programs, for the application area; and

(2) Maintain biosolids stockpiles to minimize the amount of water running on, off, or through the stockpile.

Env-Wq 810.02 Label Requirements.

(a) The generator of class A biosolids shall submit to the department with the application for a sludge quality certification, and annually with the annual report required under Env-Wq 807.06, a proposed label.

(b) The proposed label shall include the following:

(1) The name, address, and telephone number of the generator;

(2) A brief description of the product, including the process employed to treat or stabilize the biosolids;

(3) Recommended uses and appropriate application rates;

(4) Average nutrient analysis of the final biosolids product for nitrogen, phosphorus, and potassium based upon the analytical results required under Env-Wq 807.05(f) from the previous year;

(5) Average metals concentration for the 10 metals listed in Env-Wq 807.03(c) based upon the analytical results required under Env-Wq 807.05(f) from the previous year; and

(6) A statement detailing the requirements set forth in Env-Wq 810.01.

(c) The department shall approve the label if it determines that the information in the proposed label is complete and correct.

(d) Within 30 days of receipt of the label, the department shall notify the generator in writing of its approval or disapproval of the label. If the department does not approve the label, the written notification shall specify the reason(s) for the decision.

Env-Wq 810.03 Recordkeeping and Reporting. Each generator of class A biosolids or mixtures containing class A biosolids shall record the address of each location to which more than 20 cubic yards of class A biosolids or mixture is delivered at one time.

PART Env-Wq 811 WAIVERS AND EQUIVALENCY DETERMINATIONS

Env-Wq 811.01 Applicability. The purpose of the rules in this part is to establish procedures and criteria for:

(a) Requesting waivers in situations where strict compliance with all rules might not be necessary to protect human health and safety and the environment or might not be the best way to protect human health and safety and the environment in every situation; and

(b) Requesting approval of alternate methods to those specified in the rules in situations where new methods have been developed or other methods might apply more appropriately in a particular situation.

Env-Wq 811.02 Submittal of Request for Waiver or Equivalency Determination.

(a) The person seeking a waiver or equivalency determination shall submit the request in writing to the department.

(b) The request for a waiver or equivalency determination shall include the following information:

(1) The name, address, and telephone number of the person requesting the waiver or equivalency determination;

(2) If applicable, the number and name of the permit or certification holder of the permit or sludge quality certification to which the waiver or equivalency determination request relates;

(3) A specific reference to the section of the rule for which a waiver or equivalency determination is being sought;

(4) For waiver requests, the additional information specified in (c), below; and

(5) For equivalency determinations, the additional information specified in (d), below.

(c) The person submitting a waiver request shall also include the following information:

(1) An explanation of why the waiver is necessary;

(2) An explanation of the alternative(s), if any, that will be implemented in lieu of the requirement for which the waiver is sought, with supporting data; and

(3) A full explanation of how granting the waiver and approving the proposed alternatives, if any, would:

a. Be consistent with the intent of RSA 485-A and RSA 485-C; and

b. Provide an equivalent level of protection of human health and the environment.

(d) The person submitting a request for an equivalency determination shall also include the following information:

(1) An explanation of the alternative method proposed by the requestor, including supporting data demonstrating that the method provides comparable results in terms of accuracy and precision to the method specified in the rules; and

(2) An explanation of why allowing the alternative method to be used will provide at least the same degree of protection to human health and safety and the environment.

Env-Wq 811.03 Waiver Criteria. The department shall approve a request for a waiver if it finds that granting the waiver will, with the implementation of any proposed alternatives, be:

(a) At least equivalent to the requirements specified in Env-Wq 800;

(b) Adequate to ensure that the provisions of RSA 485-A and RSA 485-C are met;

(c) As protective of human health and safety and the environment as compliance with the rule that is being waived; and

(d) Consistent with the intent of applicable statutes and rules.

Env-Wq 811.04 Equivalency Determination Criteria. The department shall approve a method as equivalent to a specified method if it finds that the method:

(a) Provides comparable results in terms of accuracy and precision to the method specified in the rules; and

(b) Provides at least the same degree of protection to human health and safety and the environment as the method specified in the rules.

Env-Wq 811.05 Decision. The department shall issue a written response to a request for a waiver or equivalency determination within 90 days of receipt of the request. If the request is denied, the response shall specify the reason(s) for the decision.

APPENDIX A: STATUTES IMPLEMENTED

Rule	Statute
Env-Wq 800 (see also specific part listed below)	RSA 485-A:4, XVI-b; RSA 485-A:6, X-a
Env-Wq 811	RSA 541-A:22, IV

APPENDIX B: STATUTORY DEFINITIONS

RSA 485-A:2:

IX. “Person” means any municipality, governmental subdivision, public or private corporation, individual, partnership, or other entity.

XI-a. “Sludge” means the solid or semisolid material produced by water and wastewater treatment processes, excluding domestic septage; provided, however, sludge which is disposed of at solid waste facilities permitted by the department shall be considered solid waste and regulated under RSA 149-M.

XIV. “Surface waters of the state” means perennial and seasonal streams, lakes, ponds, and tidal waters within the jurisdiction of the state, including all streams, lakes, or ponds bordering on the state, marshes, water courses, and other bodies of water, natural or artificial.

XVI-a. “Wastewater treatment plant” means the treatment facility or group of treatment devices which treats domestic or combined domestic and industrial wastewater through alteration, alone or in combination, of the physical, chemical, or bacteriological quality of the wastewater and which dewater and handles sludge removed from the wastewater.

XXII. “Biosolids” means any sludge derived from a sewage wastewater treatment facility that meets the standards for beneficial reuse specified by the department.

XXIII. “Short paper fiber” means any sludge derived from a pulp or paper mill wastewater treatment facility that meets the standards for beneficial reuse specified by the department.